







Joint Surgical Colleges Fellowship Examinations

Syllabus

Trauma and Orthopaedic Surgery

November 2014

The Joint Surgical Colleges Fellowship Examination (JSCFE) syllabus defines the breadth and depth of knowledge, professionalism and clinical skills to be attained by surgeons in training. It specifies the levels of expertise to be anticipated at entry and at the various stages in training and defines the standards of competence expected on completion of the training programmes. The JSCFE adopts this standard as the one against which assessment will be made. The examination will assess various elements of applied knowledge, diagnostic skills, clinical judgment and professionalism.

Clinical Management

The examination is set at the level of knowledge and standard required of a Specialist in independent practice in the generality of Trauma and Orthopaedic Surgery. Given the range of cases, the spectrum of complexity and the ability to deal with variations and complications within the practice of this specialty, a candidate should be able to demonstrate that their training / experience is such that they can safely manage both common and more complex clinical problems.

Operative skills

While the examination does not formally assess technical operating ability the JSCFE considers it inappropriate to admit a candidate to the examination if there is any doubt as to their technical skills.

Professionalism and Probity

The development of a mature and professional approach in clinical practice is essential for safe and successful patient care. Attitudes towards patients and colleagues, work ethic, ability to deal with stressful issues and the effectiveness of communication skills in providing supportive care for patients and their families are the professional qualities expected of successful candidates in this examination.

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With permission, the syllabus has been produced by adapting the Curriculum Document (2013) produced by the British Orthopaedic Association under the Chairmanship of Prof Simon Frostick. The Syllabus is designed to cover the breath of modern orthopaedics and trauma surgery.

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Introduction

This syllabus is designed for candidates who have declared Trauma and Orthopaedic Surgery as their specialty interest. The standard expected is that of a Specialist in independent practice in the generality of Trauma and Orthopaedic Surgery.

Prior to sitting this examination it will be expected that the candidate will have gained competence in a wide range of knowledge and skills including the basic sciences which are common to all surgical specialities. These topics are defined in the syllabus for the MRCS examination (<u>http://www.intercollegiatemrcs.org.uk/new/guide_html</u>). This must be supplemented by the topics from the Trauma and Orthopaedic Surgery Specialty syllabus as outlined below)

Eligibility Criteria

Candidates would normally have passed the MRCS examination of one of the four Surgical Royal Colleges, but this is not mandatory.

Candidates would have successfully completed a locally registered, higher Trauma and Orthopaedic training programme

It is expected that candidates will produce documentary evidence of having completed a minimum of 4 years surgical training following award of MRCS or equivalent.

The final decision on eligibility for admission to the examination will lie with the Joint Surgical Colleges Fellowship Examination (JSCFE) Specialty Board in Trauma and Orthopaedic Surgery.

Surgeons applying for this examination would be expected to demonstrate:

- Theoretical and practical knowledge related to Trauma and Orthopaedic Surgery practice;
- Technical and operative skills;
- Clinical skills and judgement
- Generic professional and leadership skills;
- An understanding of the values that underpin the profession of surgery and the responsibilities that come with being a member of the profession;
- The special attributes needed to be a surgeon;
- A commitment to their ongoing personal and professional development and practice using reflective practice and other educational processes;
- An understanding and respect for the multi-professional nature of healthcare and their role within it

Introduction

Foreword

What do we expect of the trained trauma and orthopaedic surgeon?

The syllabus is for the generality of T&O and knowledge and skills will be assessed by the Joint Surgical Colleges Fellowship Examination. The knowledge and skills tested by the examination are not all that is required and other practical and professional skills will need to be assessed locally within the workplace. Towards the end of training in T&O, it is expected that the majority of trainees will have begun to develop a specialist interest. Training in the specialist area will continue after successful completion of the examination Therefore, maintenance of the portfolio and logbook is good practice and provides a basis for ongoing assessment and professional development.

Scope & Purpose

Purpose

The syllabus is produced to guide trauma and orthopaedic training by providing accessible information for trainees and trainers.

Competence

The acquisition of operative experience is an important factor in surgical training and the assessment of this is complementary to the skills and knowledge tested in this examination.

Competence may be defined as:

"... an individual's ability to perform in the workplace to the required standard ... competencies are the descriptions of the constituent parts of performance which answer the question 'what do people have to do to be effective in various parts of their job?"¹

Flexible and easy (intuitive) to use

Day to day delivery of training in T&O will vary between programmes and between trainers. It is intended that the syllabus design will be able to recognise this, whilst providing a consistency of standard and outcome.

Training

For the purposes of this document we have divided training into early years and specialist T&O training.

Early years training and interaction with other specialties

It is expected that any candidate undertaking this examination will have undertaken basic surgical training. This involves the acquisition of core surgical and clinical management skills. The list below is not exhaustive but contains some examples that an early years trainee should have experienced.

- Trauma & Orthopaedics
- Trauma resuscitation
- Assessment of multiply injured patient
- Assessment of back pain
- Thromboprophylaxis in T & O
- Assessment of the painful joint
- Assessment of the injured joint (knee/shoulder/wrist/hand/ankle)
- Management of open fracture
- Management of painful joint
- Management of painful back
- Cast for wrist fracture / below knee for ankle injury
- Removal of K wire
- Debridement traumatic/infected wound
- Closed reduction +/- k-wiring of a wrist fracture
- Reducing an inter-trochanteric fracture on traction table
- Surgical approach for application of a DHS.
- Surgical approach to distal fibula for fracture.
- Surgical approach of a plate to distal fibula
- Application of DHS for inter-trochanteric fracture
- Simple fractures and dislocations
- Soft tissue injuries
- Ankle fractures
- Proximal femoral fractures in the elderly
- Management of bone and soft tissue infection

Plastic Surgery

- The multidisciplinary assessment of management of tibial fractures involving skin loss
- Management of patients developing pressure ulcers
- Assessment and non-operative management of the burns patient
- Examination of the injured hand
- V-Y advancement / SSG / FTSG / excision & local flap / digital nerve block / primary repair of extensor tendon
- hand / primary repair of flexor tendon of hand / wound exploration & debridement

- Neurosurgery
- Breaking bad news
- Management of spinal cord compression or cauda equina syndrome
- Neurological assessment and initial resuscitation of patient with coma or impaired consciousness
- History and examination of a patient with spinal claudication
- Application of skull traction

General Surgery

- Superficial sepsis, including necrotising infections
- Venous disease and ulceration
- Nutrition
- Assessment of the acute abdomen history, examination or resuscitation
- Assessment of patients with possible intra-abdominal injuries
- Treatment of benign lesions of skin and subcutaneous tissues
- Acute arterial insufficiency



Job Features	
Summary: A day in the life of	Care of the injured patient
an early years trainee	Orthopaedic emergencies
	Managing patients in an orthopaedic unit
	An introduction to elective orthopaedics
Attending referrals in	Will be first on to take calls from Emergency Department
Emergency Department as first	Will be supported by a Consultant
point of call	
Attending and participating in	Presenting cases at trauma meetingss
trauma conferences and	Contributing to the overall management of the patient
receiving rounds	Treating patients holistically and with dignity
	Using direct clinical contact to gain experience and competency
Attending the operating theatre	Organising a trauma list
	Liaising with theatre staff
	Liaising with radiographers
	Liaising with anaesthetists
	Assisting a senior in theatre
	Carrying out a range of procedures
	Deemed appropriate by the supervising consultant
Care of the elderly	
	Electrolyte imbalance
	Common medical problems
	Ananging for ongoing care Rehabilitation team awareness
Post operative patient	
management on a ward	Post-operative pain management
management on a ward	Surgical and modical complications
	DVT and pulmonary embolism
Attending fracture clinics	Management of closed fractures
	Requesting appropriate belo and advice
	Communication skills (verbal and written)
Preadmission assessments	Ensuring that patients are prepared for surgery
	Following hospital care pathways where defined
Attending selected orthopaedic	Undertaking a full clinical assessment of orthopaedic conditions presenting to
clinics	the clinic.
	Having the opportunity to present the cases to a consultant and discuss the
	management
Acquiring basic science	Developing a knowledge of anatomy, physiology and pathology relevant to the
knowledge	treatment of T&O patients

Specific knowledge/skill requirements for Specialist T&O Training

The knowledge level expected is indicated on the following four point scale:

- 1. knows of
- **2.** knows basic concepts
- 3. knows generally
- **4.** knows specifically and broadly

These are difficult terms to define precisely but it will be expected that a practicing surgeon (level 4) will not only be able to apply specific, detailed knowledge of a given condition or technique but also utilise a broad knowledge of T&O and medicine to view any patient's situation holistically. Trainees must demonstrate an appreciation that knowledge changes as research progresses, and so they must also possess and apply the relevant skills to keep themselves up to date.

This is an example of what might be expected at different levels of training:

1. Knows of?

What are the clinical features of a posterior dislocation of the shoulder and what investigations would you undertake?

2. Knows basic concepts?

Describe the different types of posterior dislocation of the shoulder and comment in general terms about the treatment modalities.

3. Knows generally?

Posterior instability and acute and chronic posterior dislocations are a spectrum of disease. Rehabilitation and surgical options may need to be used in the treatment; discuss the options in detail and derive an algorithm that is appropriate to follow.

4. Knows specifically and broadly?

Arthroscopic and open surgical procedures may be appropriate in the treatment of patients with posterior instability and dislocations; discuss the evidence base for the treatment options. In a traumatic posterior dislocation of the shoulder different treatments are required dependent upon the lapse between the episode and when the patient presents for treatment; discuss the options and the likely outcome of the treatments.

The skills and procedures have 6 defined levels:

- 0 No experience expected
- 1 Has observed or knows of
- 2 Can manage with assistance

- 3 Can manage whole but may need assistance
- 4 Able to manage without assistance including potential common complications
- 5 Able to manage complex cases and their associated potential complications

T&O is a surgical specialty covering a massive spectrum of treatment options. No consultant orthopaedic surgeon can be an expert in all areas of T&O. Similarly, trainees cannot be expected to attain the highest levels of competency for all the procedures covered in the Applied Clinical Skills syllabus.

Level 4 is defined as being able to manage without assistance including potential common complications. Level 5 defines a level where the surgeon can manage all levels of complexity of the procedure. The Applied Clinical Skills syllabus shows the levels expected at each stage of training.

Overview of Specialist Training

T&O surgery is a specialty, which encompasses the management of acute injuries and conditions and elective practice covering both congenital and acquired disorders of the bones, joints and their associated soft tissues, including ligaments, nerves and muscles.

Most consultants contribute to an emergency trauma service. The vast majority of surgeons also have a specialist elective interest in orthopaedic conditions often based on an anatomical region of the body including the following:

- Hip surgery
- Knee surgery (bony and soft tissue)
- Ankle and foot
- Upper limb (shoulder and elbow)
- Upper limb (hands)
- Spine
- Bone tumour surgery
- The surgery of childhood
- Rheumatoid surgery
- Complex trauma surgery

A MINORITY OF SURGEONS HAVE VERY HIGHLY SPECIALISED PRACTICES IN ONE OF THESE AREAS.

ENTRY REQUIREMENTS FOR TRAINING IN TRAUMA AND ORTHOPAEDIC SURGERY

Entry Requirements

Knowledge

- What an orthopaedic surgeon does
- Core awareness of anatomy and pathology relevant to orthopaedic surgery
- How local practice relevant to orthopaedic surgery works in outline

Existing Skills

- Evidence of testing themselves in surgical environments
- Basics of Trauma Life Support
- Ability to work in a team and manage situation

Attitudes

- Portfolio demonstrating commitment
- Ability to describe their future development as a potential orthopaedic surgeon

Ability to acquire skills

- Being able to do simple tasks in the selection process
- Problem solving of simple orthopaedic situations

The above summarises desirable attributes in an individual wishing to train in T & O.

Syllabus

OVERVIEW

The syllabus specifically supporting T&O has three distinct elements which capture the skills, knowledge and attitudes (judgement and professionalism) required of a T&O surgeon practicing in a modern health service. The three T&O components include:-

- Applied Clinical Knowledge: what the trainee needs to know at each level.
- Applied Clinical Skills, including core competencies which are applied in procedures which encompass the core of T&O surgical practice, and are tested in a selected group of key (or indicative) procedures.
- Professional Behaviour and Leadership.



These three elements are interdependent – for example being skilled manually but a poor communicator is no more acceptable than being indifferently skilled but a good communicator.

APPLIED CLINICAL KNOWLEDGE

This component contains that which underpins training in T&O and is essential both to contextualize skills and attitudes acquired in training and in order to practice as a T&O surgeon.

The knowledge level expected is indicated on the following four point scale:

- 1. knows of
- 2. knows basic concepts
- 3. knows generally
- 4. knows specifically and broadly

These are difficult terms to define precisely but it will be expected that a practicing surgeon (level 4) will not only be able to apply specific, detailed knowledge of a given condition or technique but also utilise a broad knowledge of orthopaedics and medicine to view any patient's situation holistically. Most crucially, trainees must demonstrate an appreciation that knowledge changes as research progresses, and so they must also possess and apply the relevant skills to keep themselves up to date.

APPLIED CLINICAL SKILLS

The trainee must demonstrate the same competency and skill in all procedures they eventually perform as a consultant.

Trainees must make every effort (with the support of their local programme) to experience the scope of the whole procedures list in as much depth as is practicably possible. Trainees and trainers should aspire to a level of mastery and not just core competence.

- : The skills and procedures have 6 defined levels:
 - 0 No experience expected
 - 1 Has observed or knows of
 - 2 Can manage with assistance
 - 3 Can manage whole but may need assistance
 - 4 Able to manage without assistance including common potential complications
 - 5 Able to manage complex cases and their associated potential complications

PROFESSIONAL BEHAVIOUR & LEADERSHIP SYLLABUS

This section incorporates clinical skills alongside general aspects of behaviour as a professional in T&O. It cannot be over-emphasized how important it is for a T&O surgeon to behave in a manner which is nothing less than exemplary at all times.



APPLIED CLINICAL KNOWLEDGE SYLLABUS (TRAUMA & ORTHOPAEDICS)

Applied Clinical Knowledge Syllabus (T&O)

A trainee must be able to apply the knowledge defined below in the relevant clinical situations. They should demonstrate their competency through the ability to verbalise the knowledge and justify any action or decision.

	Competence Levels			
1 = Knows of	3 = Knows generally			
2 = Knows basic concepts	4 = Knows specifically and broadly			
Т	opic	EARLY YEARS	T&O SPECIALTY TRAINING	SPECIALTY INTEREST
APPLIED CLINICAL (BASIC) SCIENCE				
Clinical and functional anatomy with pathologi	cal and operative relevance	3	4	4
Surgical approaches to the limbs and axial ske		2	4	4
Embryology of musculoskeletal system		1	3	4
			0	
Structure and function of connective tissue	9			
Bone		3	4	4
Cartilage - articular, meniscal		3	4	4
Muscle and tendon		3	4	4
Synovium		3	4	4
Ligament		3	4	4
Nerve		3	4	4
Intervertebral disc		3	4	4
Pathology				
Thromboembolism and prophylaxis		3	4	4
Principles of fracture healing		3	4	4
Biology of wound healing		3	4	4
Tendon and ligament injury and healing		2	4	4
Nerve injury and regeneration		2	4	4
Shock - types, physiology, recognition and trea	atment	3	4	4
Metabolism and hormonal regulation		3	4	4
Metabolic and immunological response to trau	ma	3	4	4
Blood loss in trauma/surgery, fluid balance and	d blood transfusion	3	4	4
Osteoarthritis		3	4	4
Usteoporosis		3	4	4
Netabolic bone disease	()	3	4	4
	nnammatory, crystal, etc)	3	4	4
		2	4	4
Neuromuscular disorders inherited and acqu	irod	1	3	4
Mechanisms and classification of failure of joir	t replacement and of periprosthetic fracture	2: 1	1	4
	it replacement and of periprostiletic fractures	2	4	4
Osteochondritides		1	4	4
Heterotopic ossification		1	4	4
Infection of hone joint soft tissue including tu	berculosis and their prophylaxis	2	4	4
Prosthetic infection		2	4	4
Surgery in high risk and immuno- compromise	d patients	3	4	4
Prostheses and Orthoses				
Principles of design		1	4	4
Prescription and fitting of standard prostheses		1	4	4

Principles of orthotic bracing for control of disease, deformity and instability	1	4	4
Pain			
Anaesthesia - principles and practice of local and regional anaesthesia and principles of general anaesthesia	2	3	3
Pain management programmes and management of complex regional pain:	2	3	3
Pain and pain relief	3	4	4
Behavioural dysfunction and somatization	1	3	3
Musculoskeletal oncology			
Presentation, radiological features, pathological features, treatment and outcome for common benign and malignant tumours	1	3	4
Principles of management of patients with metastatic bone disease in terms of investigation, prophylactic and definitive fixation of pathological fractures and oncological management	1	4	4
Presenting features, management and outcome of soft tissue swellings, including sarcomas	2	4	4
Biomechanics & Biomaterials			
Bone grafts, bone banking and tissue transplantation	1	4	4
Biomechanics of musculoskeletal tissues	1	4	4
Biomechanics of fracture fixation	2	4	4
Tribology of natural and artificial joints	1	4	4
Design of implants and factors associated with implant failure (wear, loosening)	1	4	4
Biomaterials	1	4	4
Genetics and cell biology			
Application/relevance of modern genetics to orthopaedic disease and treatment	1	4	4
Molecular genetics and molecular biology in T&O	2	3	4
Cell biology in T&O	2	3	4
Cellular and molecular basis of wound healing	2	3	4
Diagnostics			
Musculoskeletal imaging: x-ray, contrast studies, CT, MR, ultrasound, radioisotope studies	3	4	4
Assessment of bone mass and fracture risk	3	4	4
Effects of radiation	3	4	4
Blood tests	4	4	4
Kinematics and gait analysis	1	3	4
Electrophysiological investigations	2	4	4

Clinical Environment			
Theatre Design			
Design of theatres	3	4	4
Equipment Design and Use			
Tourniquets	3	4	4
Sterilisation	3	4	4
Infection prevention and control	4	4	4
Patient warming methods and rationale	3	3	3
Skin preparation	4	4	4
Medical Ethics			
Duty of care	4	4	4
Informed consent	4	4	4
Evidence Management			
Data Analysis			
Data analysis and statistics - principles and applications	2	4	4
Principles of epidemiology	2	4	4
Clinical Trials			
Design and conduct of clinical trials	2	4	4
Quality improvement			
Quality improvement projects including principles, methods and reporting	2	4	4
Audit	2	4	4
Clinical governance	2	4	4

FOOT AND ANKLE			
Basic Science (Regional)			
Anatomy			
Anatomy of the foot and ankle and related structures	3	4	4
Surgical approaches: ankle, subtalar joint, mid-tarsal joint and forefoot and arthroscopic access	2	4	4
Surgical approach to Weber B ankle fractures	3	4	4
Physiology			
Physiology of nerve function around the foot and ankle	2	4	4
Pathology			
Inflammatory, degenerative and infective conditions of the foot and ankle	2	4	4
Instability of the foot and ankle	1	4	4
The neuropathic foot	2	4	4
Deformity			
Acquired and developmental deformities of the foot and ankle	2	4	4
Pain			
Causes of foot pain	2	4	4
Biomechanics & Biomaterials			
Biomechanics of the foot and ankle	2	4	4
Biomechanics of tendon transfer techniques	2	3	4
Biomechanics of the various types of ankle and first ray prostheses including the factors		_	
influencing design, wear and loosening	1	3	4
The functional role of orthotic devices	2	4	4
Investigations			
Radiological investigations to assess foot and ankle conditions	2	4	4
Role of diagnostic and guided injections of the foot and ankle	2	4	4
Role of examination under anaesthetic and diagnostic arthroscopy	1	4	4
Neurophysiology in foot and ankle disorders	1	4	4
Critical Conditions			
Compartment syndrome	3	4	4
Assessments			
History and examination of the foot and ankle including special clinical tests	3	4	4
Treatments			
Operative			
Prosthetic replacement in the foot and ankle	1	3	4
Arthroscopy of the foot and ankle	1	3	4
Amputations in the foot and ankle	2	4	4
Arthrodesis in the foot and ankle	1	4	4
Excision arthroplasty	1	4	4
First ray surgery	1	4	4
Lesser toe surgery	1	4	4
Ligament reconstruction in the foot and ankle	1	4	4
The rheumatoid foot and ankle	1	3	4
The neuropathic foot	1	4	4
Management of tendon, ligament and nerve injuries	1	4	4

Non operative			
Footwear modifications, orthoses and total contact casting	1	4	4
Rehabilitation of the foot and ankle	2	3	4
Complications			
Management of failed arthroplasty and management of failed soft tissue surgery	1	3	4

KNEE			
Basic Science (Regional)			
Anatomy			
Anatomy of the knee joint and related structures	3	4	4
Surgical approaches to the knee and arthroscopic access	2	4	4
Physiology			
Physiology of nerve function around the knee.	2	4	4
Pathology			
Inflammatory, degenerative and infective conditions of the knee	3	4	4
Instability of the knee, including the patellofemoral joint	2	4	4
Deformity			
Acquired and developmental deformities of the knee	2	4	4
Pain			
Causes of the painful knee	3	4	4
Neoplasia			
Benign and malignant conditions in the knee and surrounding structures	2	4	4
Biomechanics & Biomaterials			
Biomechanics of the knee	1	4	4
Biomechanics of knee arthroplasty	1	4	4
Investigations			
Radiological investigation to assess the knee	3	4	4
Diagnostic and therapeutic injections	2	4	4
Examination under anaesthetic and arthroscopy	2	4	4
Neurophysiology in knee disorders	1	4	4
Critical Conditions			
Neurovascular injuries	3	4	4
Assessments			
History and examination of the knee joint including special clinical tests	3	4	4
Treatments			
Operative			
Arthroplasty of the knee	2	4	4
Arthroscopy of the knee	2	4	4
Ligamentous instability of the knee	2	4	4
Patello-femoral disorders	1	4	4
Meniscal pathology	2	4	4
Degenerative and inflammatory arthritis	2	4	4
Principles of revision surgery for failed arthroplasty	1	4	4
Techniques available to repair and replace articular cartilage	1	4	4
Management of tendon, ligament and nerve injuries	1	4	4
Non operative			
Orthoses	1	4	4

Rehabilitation of the knee	1	3	4
Complications			
Failed arthroplasty and soft tissue surgery	1	3	4

HIP			
Basic Science (Regional)			
Anatomy			
Anatomy of the hip and pelvic region and related structures	3	4	4
Surgical approaches to the hip	2	4	4
Physiology			
Physiology of nerve function affecting the hip	2	4	4
Pathology			
Inflammatory, degenerative and infective conditions of the hip	3	4	4
Impingement disorders	1	4	4
Deformity			
Acquired and developmental deformity around the hip	1	4	4
Pain			
The painful hip	3	4	4
Biomechanics & Biomaterials			
Biomechanics of the hip	1	4	4
Biomechanics of hip arthroplasty	1	4	4
Investigations			
Radiological investigations to assess the hip	3	4	4
Diagnostic and guided injections	2	4	4
Hip arthroscopy	1	4	4
Neurophysiology in hip disorders	2	4	4
Assessments	_	-	-
History and examination of hip including special clinical tests	3	4	4
Treatments			
Operative			
Arthroplasty of the hip	2	4	4
Arthroscopy of the hip	1	3	4
Soft tissue surgery, osteotomy, osteoplasty and arthrodesis of the hip	1	3	4
Management of tendon, ligament and nerve injuries	1	4	4
Non on overting			
	4	4	4
Unnoses	1	4	4
Complications			
Complications	4	2	4
raileo antropiasty and soft tissue surgery	1	3	4

SPINE			
Basic Science (Regional)			
Anatomy			
Development of the spine, spinal cord and nerve roots	2	3	4
Anatomy and principles of surgical approaches: anterior and posterior at each level and	1	2	4
endoscopic access	1	3	4
Physiology			
Physiology of nerve function affecting the spinal cord and emerging nerves	2	4	4
Spinal shock and associated secondary problems	2	4	4
Pathology			
The aging spine and degenerative disease	2	4	4
Acute and chronic infections of the spine	1	4	4
Metabolic conditions affecting the spine	2	4	4
Neurological conditions affecting the spine			
Deformity			
Congenital and acquired conditions causing deformity around the spine e.g. scoliosis and	1	4	4
kyphosis			
Dein			
Pain	4	4	4
Causes of the acutely painful back, including referred pain e.g. acute prolapsed disc	1	4	4
Neerlesia			
Neoplasia	4	4	4
		4	4
Riomechanics & Riomaterials			
Biomechanics of the cervical and lumbar spine	1	3	4
Spinal instability as applied to trauma, tumour, infection and spondylolysis/listbasis	1	3	4
Spinal deformity	1	3	4
Spinal instrumentation and internal fixation devices	1	3	4
Use of spinal bracing	1	3	4
		0	
Investigations			
Radiological investigations (and their interpretation) used to assess common spine conditions	2	4	4
Role of diagnostic and therapeutic injections	1	4	4
Role of biopsy including routes and complications	1	4	4
Blood tests,	2	4	4
Electrophysiological studies (including cord monitoring)	1	3	4
Critical Conditions			
Cauda equina syndrome	3	4	4
Spinal trauma - assessment, immediate care and appropriate referral	2	4	4
Infections e.g. tuberculosis	1	4	4
Important complications of inflammatory spinal conditions - rheumatoid instability and ankylosing	1	3	4
Spondynus Motastatia spinal cord compression	2	4	4
The painful spine in the child	1	3	4
		5	4
Assessments			
History and examination of the painful and injured epine including special clinical tests	3	4	4
	5	4	1 4

SPINE			
Examinations of conditions causing referred symptoms to the spine (e.g. renal pain)	3	4	4
Recognition of somatisation	2	4	4
Assessment of patients after failed spinal surgery for deformity and reconstruction for non-	1	2	4
degenerative disease	1	3	4
Treatments			
Operative			
Indications, options and complications for compressive conditions	1	4	4
Indications, options and complications of instability of the spine	1	4	4
Principles of management of tumours around the spine	1	4	4
Principles of management of deformity of the spine	1	4	4
Principles of the application of spinal bracing	1	4	4
Non operative			
Non-operative treatment of disorders ,such as low back pain, sciatica	1	4	4
Management of spinal fractures e.g. osteoporotic fractures	1	4	4
Principles of interventional radiology in the management of spinal problems	1	4	4
Initial and ward care of the paralysed patient	1	4	5
Complications			
Management of failed spinal surgery	1	3	4
Management of consequences of delayed surgery	2	4	4

HAND			
Basic Science (Regional)			
Anatomy			
Anatomy of the wrist and hand region and related structures	3	4	4
Surgical approaches in the hand and wrist and arthroscopic access	2	4	4
			-
Physiology			
Physiology of nerve function around the hand	2	4	4
	_		
Pathology			
Inflammatory, degenerative and infective conditions of the hand and wrist	2	4	4
Dupuvtren's disease	2	4	4
Deformity			
Acquired and developmental deformity around the hand and wrist	1	3	4
Pain			
The painful hand and wrist	2	4	4
Biomechanics & Biomaterials			
Biomechanics of the hand and wrist	1	3	4
Biomechanics of hand and wrist arthroplasty	1	3	4
Investigations			
Radiological investigations to assess the hand and wrist	3	4	4
Neurophysiology of the hand and wrist	2	4	4
Diagnostic and guided injections	2	4	4
Examination under anaesthetic and arthroscopy	2	4	4
Critical Conditions			
Compartment syndrome	3	4	4
Assessments			
History and examination of the hand and wrist including special clinical tests	3	4	4
Treatments			
Operative			
Prosthetic replacement in the hand and wrist	1	3	4
Excision arthroplasty in the hand and wrist	1	4	4
Arthroscopy of the hand and wrist	1	3	4
Arthrodesis in hand and wrist	1	4	4
Entrapment neuropathies	3	4	4
The rheumatoid hand and wrist	2	3	4
The congenital hand	1	3	4
Dupuytren's disease	1	4	4
Non operative			
Rehabilitation of the hand and wrist	2	3	4
Orthoses	1	4	4
Complications			
Failed arthroplasty and soft tissue surgery	1	3	4

ELBOW			
Basic Science (Regional)			
Anatomy			
Anatomy of the elbow region and related structures	3	4	4
Surgical approaches to the elbow and arthroscopic access	2	4	4
Physiology			
Physiology of nerve function around the elbow	2	4	4
Pathology			
Compressive neurological problems around the elbow	3	4	4
Instability around the elbow	1	3	4
Inflammatory, degenerative and infective conditions of the elbow	3	4	4
Causes of elbow stiffness	1	3	4
Deformity			
Acquired and developmental deformity around the elbow	1	3	4
Pain			
The painful elbow	2	4	4
Biomechanics & Biomaterials			
Biomechanics of the elbow	1	3	4
Biomechanics of elbow arthroplasty	1	3	4
Investigations			
Radiological investigations to assess the elbow	3	4	4
Diagnostic and guided injections	2	4	4
Examination under anaesthetic and arthroscopy	2	4	4
Neurophysiology in elbow orders	1	4	4
Assessments	0		
History and examination of the elbow including special clinical tests	3	4	4
Trantmente			
Protective .			
Arthroplasty of the albey	4	2	4
Arthroppasty of the elbow	1	3	4
Ligamentous instability	1	2	4
	ו ר	3	4
Entraphent neuropathy	2	4	4
Soft tissue conditions	ו ר	3	4
The rhoumateid allow	2	4	4
Non operative	I	3	4
Pohabilitation of the olbow	1	2	1
	1	1	4
	I		
Complications			
Management of the failed arthronlasty and soft tissue surgery	1	3	4
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SHOULDER			
Basic Science (Regional)			
Anatomy			
Anatomy of the shoulder girdle and related structures	3	4	4
Surgical approaches to the shoulder girdle including arthroscopic access	2	4	4
Physiology			
Physiology of nerve function around the shoulder	2	4	4
Pathology			
Impingement and rotator cuff disorders	1	4	4
Instability and labral pathology of the shoulder	2	4	4
Inflammatory, degenerative and infective conditions of the shoulder girdle	3	4	4
Shoulder stiffness	1	4	4
Deformity			
Acquired and developmental deformity around the shoulder	1	3	4
Pain			
The painful shoulder	3	4	4
Biomechanics & Biomaterials			
Biomechanics of the shoulder girdle	1	4	4
Biomechanics of shoulder arthroplasty	1	3	4
Investigations			
Radiological investigations to assess the shoulder	3	4	4
Diagnostic and guided injections	2	4	4
Examination under anaesthetic and arthroscopy	1	4	4
Neurophysiology in shoulder and brachial plexus disorders	1	3	4
Assessments			
History and examination of the shoulder girdle, including special clinical tests	3	4	4
Examination of the brachial plexus	2	4	4
Treatments			
Operative			
Arthroplasty of the shoulder	1	3	4
Arthroscopy of the shoulder	1	4	4
Soft tissue disorders of the shoulder girdle	2	4	4
Arthrodesis, osteotomy and excision arthroplasty	1	3	4
Reconstructive surgery for brachial plexus and other neurological disorders	1	3	4
Non operative			
Rehabilitation of the shoulder	1	3	4
Orthoses	1	3	4
Complications			
Management of failed arthroplasty and soft tissue surgery	1	3	4

TRAUMA			
Basic Science (Regional)			
Anatomy			
Regional anatomy for trauma	3	4	4
Surgical approaches for bone and soft tissue injuries	2	4	4
Approaches for hip fractures	3	4	4
Approaches for Weber B ankle fractures	3	4	4
Physiology			
Physiological response to trauma	3	4	4
Pathology			
Delayed and non-union	2	4	4
Fractures in abnormal bone	3	4	4
Deformity			
Mal-union of fractures	2	4	4
Pain			
Pain relief in trauma patients	3	4	4
Biomechanics & Biomaterials			
Principles of open reduction and internal fixation/external fixation of fractures	2	4	4
Splintage and traction	2	4	4
Principles of casting	3	4	4
Investigations			
Radiological investigations to assess the injured patient	3	4	4
Critical Conditions			
Compartment syndrome	3	4	4
Neurovascular injuries	3	4	4
Physiological response to trauma	2	4	4
Assessments			
Initial clinical assessment of the injured patient	4	4	4
Priorities of treatment and identification of life/limb-threatening injuries	2	4	4
Treatments			
The multidisciplinary trauma team	3	4	4
	-	1	
Operative			
Fracture management (closed, open and pathological)	3	4	4
Soft tissue management	3	4	4
Amputation	2	4	4
Non operative	L	ļ	
Non-operative management of fractures	3	4	4
Rehabilitation of the injured patient	3	4	4
Complications			

TRAUMA			
Reconstructive surgery in non-unions/mal-unions	2	4	4
Specific fracture areas			
Spine			
The acute fracture and dislocation	2	4	4
Spinal shock and cord syndromes	3	4	4
Pelvis			
Pelvic/acetabular fracture stabilisation	2	4	4
Recognition of visceral/neurovascular damage	3	4	4
Shoulder			
Clavicle fractures	2	4	4
Proximal humeral fractures	2	4	4
The dislocated shoulder	3	4	4
Brachial plexus and other nerve injuries	1	4	4
Humeral shaft fractures	2	4	4
Elbow Provinal ultrar fractures	2	1	4
	2	4	4
	2	4	4
Radius and ulnar shaft fractures	2	4	4
	-		•
Wrist			
Distal radius fractures	3	4	4
Scaphoid fractures	2	4	4
Carpal injuries	2	4	4
Hand			
Metacarpal and digital injuries	2	4	4
The mangled hand	2	4	4
Proximal femur			
Proximal femoral fractures	3	4	4
Femoral shaft fractures	2	4	4
Knee and lower leg			
Periarticular fractures around the knee	2	4	4
I Ibial shaft fractures	2	4	4
Anklo			
Anne Periarticular fractures around the ankle	2	1	4
Weher B ankle fractures	3	4	4
			-
Foot			
Hindfoot iniuries	2	4	4
Midfoot injuries	2	4	4
Forefoot injuries	2	4	4

TRAUMA			
The crushed foot	2	4	4
Peri-prosthetic fractures			
Management of fractures around prostheses and implants	2	4	4
	1		

PAEDIATRIC ORTHOPAEDIC SURGERY			
Basic Science			
Anatomy			
Growth of bones, physeal anatomy and its application to fracture types and pathological	2	4	4
Anatomy of bones and joints in the growing child and its application to growth and deformity	2	4	4
Neurological processes involved in the production of deformity e.g. spina bifida, cerebral palsy and muscular dystrophy	1	3	4
Clinical Assessment			
History and examination of the child	2	4	4
Involving the parents in the assessment	2	4	4
Assessing the disabled child	1	3	4
Investigations			
Indications for plain x-ray, arthrogram, CT, MRI and the how to interpret the images	2	4	4
Indications for the use of ultrasound and nuclear imaging	2	4	4
Limitations of investigations in paediatric practice	1	3	4
Critical Conditions			
The painful hip			
Treatment			
Operative			
Fractures (including non-accidental injury) and growth plate injuries and their sequelae	2	4	4
Bone and joint infection	2	4	4
Common childhood orthopaedic conditions, e.g. irritable hip, anterior knee pain	2	4	4
Slipped epiphysis	1	4	4
Perthes' disease	1	3	4
Developmental dysplasia of the hip	1	4	4
	1	4	4
	1	4	4
Forefoot deformities	1	4	4
	1	3	4
	2 1	3	4
	1	3	4
	1	3	4
	1	3	4
		4	4
Non-operative			
The treatment of normal variants such knock knees, flat feet, femoral anteversion	1	4	4
Orthoses	1	3	4
Rehabilitation of the child	1	3	4
Determining physical disability	1	3	4
Screening for congenital abnormalities	1	3	4

Applied Clinical Skills

Recording a surgical skill such as suturing or taking consent in isolation does not tell us sufficiently well how a professional deals with clinical problems. Neither do we want to simply credential individuals to carry out an elective or trauma procedure. We want to train and assess the ability of the trainee in the context of the whole patient problem and extrapolate that to dealing with problems in general.

A trainee must be able to demonstrate their competence in the procedures below at the appropriately marked level and stage of training. **Competence Levels** 0 = No experience expected 3 = Can manage whole but may need assistance 4 = Able to manage without assistance including potential common 1 = Has observed or knows of complications 5 = Able to manage complex cases and their associated potential complications 2 = Can manage with assistance PECIALTY PECIALTY RAINING **VTEREST** Topic EARS 80 80 Trauma General Compartment syndrome Fasciotomy for compartment syndrome 4 5 1 Measurement of compartment pressures 1 4 5 Correction of malunion or other deformity 4 0 5 Evacuation of haematoma 2 5 5 Excision / ablation of ingrowing nail 1 5 5 Iliac crest bone graft harvesting 2 5 5 Infection 3 5 5 Incision and drainage of abscess Irrigation and debridement native joint for infection 1 4 5 Metalware and frames Application of external fixator (not spanning or Ilizarov) 0 4 5 Application of Ilizarov frame 0 2 5 Application of skeletal traction 1 5 5 Application of spanning external fixator 0 4 5 Removal external fixator or frame 2 5 5 Removal K wires or skeletal traction 2 5 5 Removal metal 2 4 5 **Neurovascular injuries**

Arterial repair +/- graft	0	1	5
Nerve repair	0	3	5
Open reduction and fixation of periprosthetic fracture	0	3	5
ORIF osteochondral fragment in joint	0	3	5
Removal foreign body from skin / subcutaneous tissue	2	5	5
Tendon repair	1	4	5
Wound management			
Free flap	0	1	1
Full thickness skin graft	0	3	5
Muscle flap	0	1	1
Pedicle flap	0	1	1
Split skin graft	0	3	5
Transposition flap	0	1	1
Wound closure	3	5	5
Wound debridement	3	5	5
Elective General (Site Non Specific)			
Aspirations / injections			
Aspiration / injection ankle joint	0	4	5
Aspiration / injection elbow joint	0	4	5
Aspiration / injection foot joint	0	4	5
Aspiration / injection hip joint	0	3	5
Aspiration / injection hand and wrist	0	4	5
Aspiration / injection knee joint	2	5	5
Aspiration / injection shoulder joint	0	5	5
Botulinum toxin injection - musculoskeletal	0	3	5
Benign tumour excision (not exostosis)	0	3	5
Biopsy bone - needle	0	3	5
Biopsy bone - open	0	3	5
Currettage pinsites	0	5	5
Cyst bone curettage +/- bone graft	0	3	5
Distraction lengthening of bone upper limb	0	2	5
Endoprosthetic replacement for malignant bone tumour - not femur / humerus / tibia	0	1	5
Epiphysiodesis	0	1	5
Exostosis / osteochondroma excision	0	3	5
Injection of bone cyst	0	1	5
Malignant tumour excision	0	1	5
Nerve decompression / neurolysis	2	4	5
Osteomyelitis excision including sequestrectomy	0	3	5
Soft tissue procedures			
Biopsy soft tissue	0	3	5
Bursa excision	0	4	5
Ganglion excision	0	4	5
Muscle biopsy	0	4	5
Release contracture joint	0	3	5
Synovectomy	0	3	5
		-	

Tendon decompression	0	4	5
Tendon lengthening	0	3	5
Tendon transfer	0	3	5
Tenodesis	0	3	5
Amputations			
Forequarter amputation	0	1	5
Above elbow amputation	0	2	5
Below elbow amputation	0	2	5
Finger amputation	0	4	5
Hindquarter amputation	1	1	5
Above knee amputation	0	3	5
Through knee amputation	0	1	5
Below knee amputation	1	4	4
Through ankle amputation	0	1	5
Hindfoot amputation	0	2	5
Midfoot amputation	0	1	5
Toe amputation	0	4	5

Applied Clinical Skills: Spine

A trainee must be able to demo	onstrate their competence in the procedures below at the appropriately marked level and stage of training.
	Competence Levels
0 = No experience expected	3 = Can manage whole but may need assistance
1 = Has observed or knows of	4 = Able to manage without assistance including potential common complications
2 = Can manage with assistance	5 = Able to manage complex cases and their associated potential complications

Торіс	EARLY YE <u>A</u> RS	T&O SPECIALTY TRAINING	SPECIALTY INTEREST
Trauma Spine			
Cervical Spine			_
Anterior column reconstruction cervical spine	0	1	5
Anterior fixation fracture / dislocation cervical spine	0	1	5
Application halo / tong traction cervical spine	0	1	5
MUA fracture / dislocation cervical spine	0	1	5
Non-classifiable cervical spine trauma procedure	0	1	5
Posterior column reconstruction cervical spine	0	1	5
Posterior fixation fracture / dislocation cervical spine	0	1	5
Brachial Plexus			
Exploration / repair / grafting brachial plexus	0	1	5
Exploration of brachial plexus	0	1	5
Repair +/- grafting brachial plexus	0	1	5
		!	
			-
Anterior column reconstruction thoracic spine	0	1	5
Anterior decompression / fixation thoracic spine	0	1	5
Anterior decompression thoracic spine	0	1	5
Posterior column reconstruction thoracic spine	0	1	5
Posterior decompression / fixation thoracic spine	0	1	5
Posterior decompression thoracic spine	0	1	5
	-		
			-
Anterior column reconstruction lumbar spine	0	1	5
Anterior decompression / fixation lumbar spine	0	1	5
Anterior decompression lumbar spine	0	1	5
Posterior column reconstruction lumbar spine	0	1	5
Posterior decompression / fixation lumbar spine	0	1	5
Posterior decompression lumbar spine	0	1	5
Торіс	EARLY YEARS	T&O SPECIALTY TRAINING	SPECIALTY INTEREST
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Elective Spine			
Cervical Spine	_		_
Anterior column reconstruction cervical spine	0	1	5
	0	1	5
Cervical laminectomy	0	1	5
Cervical laminoplasty	0	1	5
Cervical vertebrectomy for myelopathy	0	1	5
Excision hemivertebra	0	1	5
Fixation and fusion procedures			_
Anterior decompression +/- fixation / fusion (C2 - C7)	0	1	5
Atlantoaxial fixation +/- fusion	0	1	5
C1 pedicle screws and C2 fusion	0	1	5
Occipital / cervical / thoracic fusion	0	1	5
	0	1	5
Occipito-cervical fusion +/- fixation	0	1	5
Posterior decompression +/- fixation / fusion (C2 - C7)	0	1	5
I ransarticular screws C1/C2	0	1	5
Investigations and injections	-		_
Biopsy cervical spine	0	1	5
Discogram	0	1	5
Epidural	0	1	5
Nerve root / facet joint injection cervical spine	0	1	5
Osteotomy for spine sagittal plain imbalance	0	1	5
Posterior column reconstruction cervical spine	0	1	5
Revision cervical discectomy	0	1	5
Thoracic outlet obstruction	-		_
Excision cervical / 1st rib	0	1	5
I horacic outlet release (not excision cervical / 1st rib)	0	1	5
	0	4	_
Anterior column reconstruction thoracic spine	0	1	5
	0	1	5
Excision nemivertebra	0	1	5
Fixation or fusion procedures	0		_
Anterior decompression +/- fixation / fusion	0	1	5
Posterior decompression +/- fixation / fusion	0	1	5
Investigations and injections			_
Biopsy thoracic spine	0	1	5
Discogram	0	1	5
Kyphosis correction	-		_
Kyphoplasty corpectomy	0	1	5
Kyphosis correction - anterior and posterior	0	1	5
Kyphosis correction - anterior only	0	1	5
Posterior column reconstruction thoracic spine	0	1	5
Scoliosis correction - anterior release +/- instrumentation	0	1	5

Торіс	EARLY YEARS	T&O SPECIALTY TRAINING	SPECIALTY INTEREST
Scoliosis correction - posterior fusion +/- instrumentation	0	1	5
Scoliosis correction			
Anterior release + posterior fusion and instrumentation for scoliosis	0	1	5
Growing rods for scoliosis	0	1	5
Lengthening of growing rods for scoliosis	0	1	5
Localiser cast for scoliosis	0	1	5
Scoliosis correction - anterior release +/- instrumentation	0	1	5
Scoliosis correction - posterior fusion +/- instrumentation	0	1	5
Thoracic disc replacement	0	1	5
Vertebroplasty	0		5
Thoracoscopic spinal procedures +/- instrumentation	0	1	5
Lumbar Spine			
Anterior column reconstruction lumbar spine	0	1	5
Decompression lumbar spine without fusion (not discectomy alone)	0	2	5
Discectomy open / micro	0	2	5
Excision hemivertebra	0	1	5
Fixation and fusion procedures			
ALIF	0	1	5
Decompression lumbar spine with fusion +/- fixation	0	1	5
PLIF	0	1	5
TLIF	0	1	5
Investigations and injections			
Discogram	0	1	5
Facet joint injection lumbar spine	0	1	5
Nerve root injection lumbar spine	0	1	5
Lumbar disc replacement	0	1	5
Lumbar spine - dynamic neutralisation system	0	1	5
Osteotomy for spine sagittal plain imbalance	0	1	5
Posterior column reconstruction lumbar spine	0	1	5
Revision lumbar discectomy	0	1	5
Vertebroplasty	0	1	5

Applied Clinical Skills: Shoulder

A trainee must be able to demo	onstrate their competence in the procedures below at the appropriately marked level and stage of training.
	Competence Levels
0 = No experience expected	3 = Can manage whole but may need assistance
1 = Has observed or knows of	4 = Able to manage without assistance including potential common complications
2 = Can manage with assistance	5 = Able to manage complex cases and their associated potential complications

Торіс	EARLY YEARS	T&O SPECIALTY TRAINING	SPECIALTY INTEREST
Trauma Shoulder			
Clavicle			
ORIF clavicle fracture	0	4	5
ORIF non-union clavicle fracture	0	3	5
SC joint dislocation closed / open reduction	0	3	5
SC joint instability/open stabilisation	0	2	5
Shoulder			
Acromioclavicular joint dislocation acute ORIF	0	3	5
Anterior dislocation shoulder			
Anterior dislocation shoulder closed reduction	2	5	5
Anterior dislocation shoulder open reduction +/- fixation	0	3	5
Fracture proximal humerus			
Fracture proximal humerus hemiarthroplasty	0	3	5
Fracture proximal humerus interlocking IM nail	0	3	5
Fracture proximal humerus ORIF	0	3	5
Glenoid fracture ORIF	0	2	5
Irrigation and debridement native joint for infection - shoulder	0	2	5
Posterior dislocation shoulder			
Posterior dislocation shoulder closed reduction	0	3	5
Posterior dislocation shoulder open reduction +/- fixation	0	3	5
Scapula fracture ORIF	0	2	5
Humerus			
Fracture diaphysis humerus			
Fracture diaphysis humerus non-operative	1	4	5
Non-union ORIF +/- bone grafting	0	3	5
Fracture diaphyseal humerus application of external fixator	0	3	5
Fracture diaphyseal humerus non-union - ORIF +/- bone grafting	0	3	5
Fracture diaphysis humerus IM nailing	0	4	5
Fracture diaphysis humerus ORIF plating	0	4	5

Торіс	EARLY YEARS	T&O SPECIALTY TRAINING	SPECIALTY INTEREST
Elective Shoulder			
Clavicle			
Osteotomy and internal fixation of clavicle malunion	0	2	5
Shoulder			
Arthroscopic procedures			
Arthroscopic arthrolysis for capsulitis of shoulder	0	4	5
Arthroscopic biceps tenodesis	0	2	5
Arthroscopic subacromial decompression	0	4	5
Arthroscopic removal loose body - shoulder			
Arthroscopy diagnostic - shoulder	0	4	5
Capsular / rotator cuff repair			
Anterior repair for instability arthroscopic	0	2	5
Anterior repair for instability open including capsular shift	0	2	5
Posterior repair for instability including capsular shift	0	2	5
Rotator cuff repair (arthroscopic) +/- acromioplasty	0	2	5
Rotator cuff repair (open) +/- acromioplasty	0	2	5
MUA shoulder	0	4	5
Shoulder arthrodesis	0	1	5
Shoulder arthroplasty			
Hemiarthroplasty shoulder (elective)	0	2	5
Resurfacing hemiarthroplasty of shoulder	0	2	5
Reverse polarity (inverse) shoulder replacement	0	2	5
Shoulder replacement revision	0	1	5
Total shoulder replacement	0	2	5
Shoulder girdle procedures			
Acromioclavicular joint excision - arthroscopic / open / lateral clavicle	0	2	5
Acromioclavicular joint reconstruction (e.g. Weaver Dunn)	0	2	5
Acromioplasty open	0	3	5
Latarjet procedure	0	2	5
Levator scapulae transfer for trapezius palsy	0	1	5
Scapulothoracic fusion	0	1	5
Humerus			
Endoprosthetic replacement for malignant bone tumour - humerus	0	1	5

Applied Clinical Skills: Elbow

A trainee must be able to demonstrate their competence in the procedures below at the appropriately marked level and stage of training.			
	Competence Levels		
0 = No experience expected	3 = Can manage whole but may need assistance		
1 = Has observed or knows of	4 = Able to manage without assistance including potential common complications		
2 = Can manage with assistance	5 = Able to manage complex cases and their associated potential complications		

Торіс	EARLY YEARS	T&O SPECIALTY TRAINING	SPECIALTY INTEREST
Trauma Elbow			
ElDow		0	5
Application of spanning external fixator	0	2	5
	0	3	5
	0	2	5
	0	2	5
Dislocated elbow +/- fracture closed reduction	0	4	5
Dislocated elbow +/- fracture open reduction +/- fixation	0	т З	5
Intraarticular distal humerus fracture ORIE	0	4	5
Irrigation and debridement native joint for infection – elbow	0	3	
Lateral condyle fracture ORIF	0	4	5
Medial condyle / epicondyle fracture MUA / percutaneous wire / ORIF	0	4	5
Olecranon fracture ORIF	0	4	5
Radial head / neck fracture			
Radial head / neck fracture ORIF	0	3	5
Radial head excision	0	4	5
Radial head replacement for fracture	0	4	5
Supracondylar elbow fracture			
Supracondylar elbow fracture MUA +/- percutaneous wires	0	4	5
Supracondylar elbow fracture open reduction	0	4	5
Tendon repairs			

Торіс	EARLY YEARS	T&O SPECIALTY TRAINING	SPECIALTY INTEREST
Repair of distal biceps tendon rupture	0	3	5
Forearm			
Fasciotomy for compartment syndrome	1	4	5
Fracture shaft radius / ulna:			
Fracture shaft radius / ulna IM nailing	0	3	5
Fracture shaft radius / ulna MUA & POP	0	4	5
Fracture shaft radius / ulna ORIF	0	4	5
Galeazzi fracture ORIF	0	4	5
Monteggia fracture ORIF	0	4	5
Elective Elbow			
Elbow			
Arthrolysis elbow (open/arthroscopic)	0	2	5
Arthroscopy elbow diagnostic	0	2	5
Arthoscopy elbow therapeutic	0	2	5
Arthrotomy elbow	0	4	5
Excision radial head +/- synovectomy	0	2	5
OK procedure	0	2	5
Tennis / golfer elbow release	0	4	5
Total elbow replacement			
Total elbow replacement	0	2	5
Total elbow replacement - aseptic revision	0	1	4
Total elbow replacement for trauma	0	1	5
Total elbow replacement revision 1st stage	0	1	4
Total elbow replacement revision 2nd stage	0	1	4
Ulnar nerve decompression / transposition	0	4	5
Forearm			
Forearm malunion correction or other deformity	0	1	5

Applied Clinical Skills: Hand

A trainee must be able to demonstrate their competence in the procedures below at the appropriately marked level and stage of training.		
	Competence Levels	
0 = No experience expected	3 = Can manage whole but may need assistance	
1 = Has observed or knows of	4 = Able to manage without assistance including potential common complications	
2 = Can manage with assistance	5 = Able to manage complex cases and their associated potential complications	

Торіс	EARLY YEARS	T&O SPECIALTY TRAINING	SPECIALTY INTEREST
Trauma Hand Wrist			
Fracture distal radius:			
Fracture distal radius – closed non-op	3	5	5
Fracture distal radius external fixation	1	4	5
Fracture distal radius MUA & percutaneous wires	3	5	5
Fracture distal radius ORIF	1	4	5
Application of spanning external fixator	1	4	5
Arterial repair - wrist	0	1	5
Vein repair – wrist	0	1	5
Carpal fracture / dislocation:			
Carpal fracture / dislocation MUA & percutaneous wires	0	3	5
Carpal fracture / dislocation MUA & POP	0	3	5
Carpal fracture / dislocation ORIF	0	3	5
Irrigation and debridement prosthesis for infection – wrist	0	2	5
Nerve repair - wrist	0	3	5
Replantation of hand	0	0	1
Revascularisation of hand	0	0	1
Scapho-lunate ligament reconstruction	0	2	5
Scaphoid fracture:	-	-	_
Scaphoid fracture non-operative	2	3	5
Scaphoid fracture MUA & percutaneous wires	0	2	5
Scaphoid fracture non-union ORIF +/- graft (excluding vascularised graft)	0	2	5
Scaphoid fracture non-union using vascularised graft	0	2	5
Scaphoid fracture ORIF	0	2	5
Hand			
1st ray fracture / dislocation			
1st ray fracture / dislocation external fixation	0	2	5

Торіс	EARLY YEARS	T&O SPECIALTY TRAINING	SPECIALTY INTEREST
1st ray fracture / dislocation MUA & percutaneous wires	0	3	5
1st ray fracture / dislocation MUA & POP	2	4	5
1st ray fracture / dislocation ORIF	0	2	5
Carpal fracture / dislocation			
Carpal fracture / dislocation non-op	0	3	5
Carpal fracture / dislocation MUA & percutaneous wires	0	3	5
Carpal fracture / dislocation MUA & POP	0	3	5
Carpal fracture / dislocation ORIF	0	2	5
5th ray fracture / dislocation			
5th ray fracture / dislocation external fixation	0	2	5
5th ray fracture / dislocation MUA & percutaneous wires	0	3	5
5th ray fracture / dislocation MUA & POP	2	3	5
5th ray fracture / dislocation ORIF	0	2	5
Excision / ablation of ingrowing nail	2	5	5
Finger tip reconstruction			
Finger tip reconstruction - advancement flap	0	3	5
Finger tip reconstruction - cross finger flap	0	3	5
Finger tip reconstruction - homodigital neurovascular island flap	0	2	5
Finger tip terminalisation	2	5	5
Nail bed repair	2	4	5
Hand compartment syndrome decompression	2	4	5
Infection			
High pressure injection injuries	0	2	5
Infection hand drainage (not tendon sheath)	1	3	5
Infection tendon sheath drainage	1	3	5
IP.I fracture / dislocation (PIP.I and DIP.I):		0	0
IP.I fracture / dislocation external fixator	1	2	5
IP.I fracture / dislocation MLIA & percutaneous wires	1	4	5
IP.I fracture / dislocation MIA +/- POP	2	4	5
IP.I fracture / dislocation ORIE	0	2	5
	Ŭ	-	0
Ligament repair			
Ligament repair hand excluding thumb MCPJ ulnar collateral ligament	0	2	5
Thumb MCPJ ulnar collateral repair	1	5	5
		0	•
MCPJ fracture / dislocation			
MCPJ fracture / dislocation external fixator	0	2	5
MCPJ fracture / dislocation MUA & percutaneous wires	1	4	5
MCPJ fracture / dislocation MUA +/- POP	1	4	5
MCPJ fracture / dislocation ORIF	0	3	5
Metacarpal fracture (not 1st or 5th) non-op	2	4	5
Metacarpal fracture (not 1st or 5th) MUA & percutaneous wires	1	4	5
Metacarpal fracture (not 1st or 5th) MUA +/- POP	2	5	5

Metacarpal fracture (not 1st or 5th) QRIF 0 3 5 Metacarpal fracture (not 1st or 5th) external fixation 0 3 5 Neurovascular injuries 0 1 2 Arterial repair +/- graft hand / digit 0 1 2 Nerve repair hand / digit 0 1 2 Vein repair +/- graft hand / digit 0 1 2 Phalangeal fracture non-op 2 4 5 Phalangeal fracture MUA & percutaneous wires 1 4 5 Phalangeal fracture MUA & percutaneous tissue 3 5 5 Replantation finger 0 3 5 5 Phalangeal fracture MUA & percutaneous tissue 3 5 5 Replantation finger 0 1 2 3 5 Phalangeal fracture MUA & percutaneous tissue 3 5 5 5 Replantation finger 0 1 5 5 5 5 5 5 5 5 5 5 5 </th <th>Торіс</th> <th>EARLY YEARS</th> <th>T&O SPECIALTY TRAINING</th> <th>SPECIALTY INTEREST</th>	Торіс	EARLY YEARS	T&O SPECIALTY TRAINING	SPECIALTY INTEREST
Metacarpal fracture (not 1st or 5th) external fixation 0 3 5 Neurovascular injuries 1 2 Atterial repair +/- graft hand / digit 0 1 2 Nerve repair hand / digit 0 1 2 Vein repair +/- graft hand / digit 0 1 2 Vein repair +/- graft hand / digit 0 1 2 Phalangeal fracture MUA & percutaneous wires 1 4 5 Phalangeal fracture MUA +/ POP 2 4 5 Phalangeal fracture ONLP 2 4 5 Removal foreign body from skin / subcutaneous tissue 3 5 5 Removal foreign body from skin / subcutaneous tissue 3 5 5 Removal foreign body from skin / subcutaneous tissue 3 5 5 Removal foreign body from skin / subcutaneous tissue 3 5 5 Removal foreign body from skin / subcutaneous tissue 3 5 5 Removal foreign body from skin / subcutaneous tissue 3 5 5 Pediclef flap </td <td>Metacarpal fracture (not 1st or 5th) ORIF</td> <td>0</td> <td>3</td> <td>5</td>	Metacarpal fracture (not 1st or 5th) ORIF	0	3	5
Neurovascular injuries Image: Market State S	Metacarpal fracture (not 1st or 5th) external fixation	0	3	5
Neurovascular injuries Image: Constraint of the constraint of				
Arterial repair 4-/ graft hand / digit 0 1 2 Nerve repair hand / digit 1 4 5 Revascularisation finger 0 1 2 Vein repair 4-/ graft hand / digit 0 1 2 Phalangeal fracture MUA & percutaneous wires 1 4 5 Phalangeal fracture MUA 4-/- POP 2 4 5 Removal foreign body from skin / subcutaneous tissue 3 5 5 Replantation finger 0 1 2 4 Full thickness skin graft 2 3 5 Pedicie flap 0 2 3 3 Split skin graft 2 4 5 5	Neurovascular injuries			
Nerve repair hand / digit 1 4 5 Revascularisation finger 0 1 2 Vein repair +/ graft hand / digit 0 1 2 Phalangeal fracture non-op 2 4 5 Phalangeal fracture MUA & percutaneous wires 1 4 5 Phalangeal fracture MUA +/ POP 2 4 5 Phalangeal fracture ORIF 0 3 5 Report fracture MUA +/ POP 0 1 2 Skin graft 0 1 2 Free flap 0 1 5 Full thickness skin graft 2 3 5 Fedice flap 0 2 3 Pedice flap 0 2 3 Split skin graft 2 4 5 Transposition flap 0 2 3 Tangential excision of hand burns 0 1 2 Tendon repair flexor zone 1 0 2 5 Tendon repair flexor zone 2	Arterial repair +/- graft hand / digit	0	1	2
Revascularisation finger 0 1 2 Vein repair +/- graft hand / digit 0 1 2 Phalangeal fracture non-op 2 4 5 Phalangeal fracture MUA & percutaneous wires 1 4 5 Phalangeal fracture MUA +/- POP 2 4 5 Phalangeal fracture MUA +/- POP 2 4 5 Removal foreign body from skin / subcutaneous tissue 3 5 5 Removal foreign body from skin / subcutaneous tissue 3 5 5 Replantation finger 0 1 5 5 Skin graft - - - - Free flap 0 1 5 5 Reversed radial forearm flap 0 2 3 3 Transportion flap 0 2 3 3 Tangential existion of hand burns 0 1 2 5 Tendon repair flax zone 2 0 2 5 5 Tendon repair flex zone 3-5	Nerve repair hand / digit	1	4	5
Vein repair +/- graft hand / digit 0 1 2 Phalangeal fracture non-op 2 4 5 Phalangeal fracture MUA & percutaneous wires 1 4 5 Phalangeal fracture MUA &/- POP 2 4 5 Phalangeal fracture ORIF 0 3 5 Removal foreign body from skin / subcutaneous tissue 3 5 5 Removal foreign body from skin / subcutaneous tissue 0 1 2 Skin graft 0 1 5 5 Replantation finger 0 1 5 5 Pedicle flap 0 1 5 5 Pedicle flap flap 0 2 3 5 Tarsposition flap 0 2 3 5 Tangential excision of hand burns 0 1 2 3 Tangential excision of hand burns 0 2 5 5 Tendon repair flaxor zone 1 0 2 5 5 Tendon repair flexor zone 2 <td>Revascularisation finger</td> <td>0</td> <td>1</td> <td>2</td>	Revascularisation finger	0	1	2
Phalangeal fracture non-op 2 4 5 Phalangeal fracture MUA kepercutaneous wires 1 4 5 Phalangeal fracture MUA +/- POP 2 4 5 Phalangeal fracture ORIF 0 3 5 Removal foreign body from skin / subcutaneous tissue 3 5 5 Replantation finger 0 1 2 4 5 Skin graft 0 1 5 5 5 Free flap 0 1 5 5 5 Pedicle flap 0 2 3 3 5 Transposition flap 0 2 3 3 5 Tendon repair 0 2 5 5 5 Tendon repair flexor zone 1 0 2	Vein repair +/- graft hand / digit	0	1	2
Phalangeal fracture MUA & percutaneous wires 1 4 5 Phalangeal fracture MUA +/- POP 2 4 5 Phalangeal fracture ORIF 0 3 5 Removal foreign body from skin / subcutaneous tissue 3 5 5 Replantation finger 0 1 2 3 Skin graft 0 1 5 Free flap 0 1 5 Pedicle flap 0 2 5 Reversed radial forearm flap 0 2 3 Split skin graft 2 4 5 Transposition flap 0 2 3 Tangential excision of hand burns 0 1 2 Vendor repair 0 2 5 5 Tendon repair extensor 2 5 5 5 Tendon repair flexor zone 1 0 2 5 5 Tendon repair flexor zone 3-5 0 4 5 Mound closure 0 2	Phalangeal fracture non-op	2	4	5
Phalangeal fracture MUA +/- POP 2 4 5 Phalangeal fracture ORIF 0 3 5 5 Removal foreign body from skin / subcutaneous tissue 3 5 5 Replantation finger 0 1 2 Skin graft 0 1 2 Free flap 0 1 5 Full thickness skin graft 2 3 5 Pedicle flap 0 2 3 Reversed radial forearm flap 0 2 3 Split skin graft 2 4 5 Transposition flap 0 2 3 Tangential excision of hand burns 0 1 2 Tendon repair 0 2 5 5 Tendon repair flexor zone 1 0 2 5 5 Tendon repair flexor zone 2 0 2 5 5 Tendon repair flexor zone 3-5 0 4 5 Vound closure 0 2 5	Phalangeal fracture MUA & percutaneous wires	1	4	5
Phalangeal fracture ORIF 0 3 5 Removal foreign body from skin / subcutaneous tissue 3 5 5 Replantation finger 0 1 2 Skin graft 0 1 5 Free flap 0 1 5 Free flap 0 1 5 Pedicle flap 0 2 3 Pedicle flap 0 2 3 Split skin graft 2 4 5 Transposition flap 0 2 3 Tangential excision of hand burns 0 1 2 Tendon repair 0 2 5 Tendon repair extensor 2 5 5 Tendon repair flexor zone 1 0 2 5 Tendon repair flexor zone 2 0 2 5 Tendon repair flexor zone 3-5 0 4 5 Wound closure 0 2 5 Delayed primary or secondary 1 4	Phalangeal fracture MUA +/- POP	2	4	5
Removal foreign body from skin / subcutaneous tissue 3 5 5 Replantation finger 0 1 2 Skin graft 0 1 5 Free flap 0 1 5 Full thickness skin graft 2 3 5 Pedicle flap 0 2 5 Reversed radial forearm flap 0 2 3 Split skin graft 2 4 5 Transposition flap 0 2 3 Tangential excision of hand burns 0 1 2 Tendon repair 0 2 5 Tendon repair extensor 2 5 5 Tendon repair flexor zone 1 0 2 5 Tendon repair flexor zone 2 0 2 5 Tendon repair flexor zone 3-5 0 4 5 Wound closure 0 2 5 Delayed primary or secondary 1 4 5 Wrist 0 2<	Phalangeal fracture ORIF	0	3	5
Replantation finger 0 1 2 Skin graft - - - - Free flap 0 1 5 -	Removal foreign body from skin / subcutaneous tissue	3	5	5
Skin graft Image: constraint of the second sec	Replantation finger	0	1	2
Skin graft 0 1 5 Free flap 0 1 5 Full thickness skin graft 2 3 5 Pedicle flap 0 2 3 5 Reversed radial forearm flap 0 2 3 5 Split skin graft 2 4 5 5 Transposition flap 0 2 3 1 Tangential excision of hand burns 0 1 2 3 Tangential excision of hand burns 0 1 2 5 Tendon repair 0 1 2 5 Tendon repair extensor 2 5 5 Tendon repair flexor zone 1 0 2 5 Tendon repair flexor zone 2 0 2 5 Tendon repair flexor zone 3-5 0 4 5 Wound closure 1 4 5 Delayed primary or secondary 1 4 5 Wrist 0 3				
Free ftap 0 1 5 Full thickness skin graft 2 3 5 Pedicle ftap 0 2 3 Reversed radial forearm ftap 0 2 3 Split skin graft 2 4 5 Transposition ftap 0 2 3 Tangential excision of hand burns 0 1 2 Tendon repair 0 1 2 Tendon repair 0 2 5 Tendon repair extensor 2 5 5 Tendon repair flexor zone 1 0 2 5 Tendon repair flexor zone 2 0 2 5 Tendon repair flexor zone 3-5 0 4 5 Wound closure Delayed primary or secondary 1 4 5 Wrist 0 2 5 5 Arthrocdesis wrist (includes partial arthrodesis) 0 3 5 5 De Qu	Skin graft			
Full thickness skin graft 2 3 5 Pedicle flap 0 2 5 Reversed radial forearm flap 0 2 3 Split skin graft 2 4 5 Transposition flap 0 2 3 Tangential excision of hand burns 0 1 2 Tendon repair 0 1 2 Tendon repair 0 2 5 Tendon repair flexor zone 1 0 2 5 Tendon repair flexor zone 2 0 2 5 Tendon repair flexor zone 2 0 2 5 Tendon repair flexor zone 3-5 0 4 5 Wound closure 1 4 5 Wound debridement 1 4 5 Wrist 0 2 5 Arthroscopy wrist 0 3 5 Decompression / synovectomy tendons 3 5 5 Decompression / synovectomy tendons 0 3 5 Decompression / synovectomy tendons 0 3	Free flap	0	1	5
Pedicle flap 0 2 5 Reversed radial forearm flap 0 2 3 Split skin graft 2 4 5 Transposition flap 0 2 3 Tangential excision of hand burns 0 1 2 Tendon repair 0 1 2 Tendon repair 0 2 5 Tendon repair extensor 2 5 5 Tendon repair flexor zone 1 0 2 5 Tendon repair flexor zone 2 0 2 5 Tendon repair flexor zone 3-5 0 4 5 Wound closure 0 2 5 Delayed primary or secondary 1 4 5 Wist 1 4 5 Arthroclesis wrist (includes partial arthrodesis) 0 3 5 De carport varis's decompression 3 5 5 Decompression / synovectomy tendons 0 3 5 Denervation wrist	Full thickness skin graft	2	3	5
Reversed radial forearm flap 0 2 3 Split skin graft 2 4 5 Transposition flap 0 2 3 Tangential excision of hand burns 0 1 2 Tendon repair 0 1 2 Tendon repair 0 2 5 Spaghetti wrist 0 2 5 Tendon repair flexor zone 1 0 2 5 Tendon repair flexor zone 2 0 2 5 Tendon repair flexor zone 3-5 0 4 5 Wound closure 0 2 5 Delayed primary or secondary 1 4 5 Wrist 1 4 5 Arthrodesis wrist (includes partial arthrodesis) 0 3 5 Arthroscopy wrist 0 3 5 5 De Quervain's decompression 3 5 5 De Quervain's decompression 3 5 5 Denervation wrist	Pedicle flap	0	2	5
Split skin graft 2 4 5 Transposition flap 0 2 3 Tangential excision of hand burns 0 1 2 Tendon repair 0 2 5 Tendon repair 0 2 5 Spaghetti wrist 0 2 5 Tendon repair extensor 2 5 5 Tendon repair flexor zone 1 0 2 5 Tendon repair flexor zone 2 0 2 5 Tendon repair flexor zone 3-5 0 4 5 Wound closure 0 2 5 Delayed primary or secondary 1 4 5 Wound debridement 1 4 5 Wrist 0 3 5 Arthrodesis wrist (includes partial arthrodesis) 0 3 5 Arthroscopy wrist 0 2 5 De Quervain's decompression 3 5 5 De Quervain's decompression 1 5 5 Decompression / synovectomy tendons 0 3 <td>Reversed radial forearm flap</td> <td>0</td> <td>2</td> <td>3</td>	Reversed radial forearm flap	0	2	3
Transposition flap 0 2 3 Tangential excision of hand burns 0 1 2 Tendon repair 0 1 2 Tendon repair 0 2 5 Spaghetti wrist 0 2 5 Tendon repair extensor 2 5 5 Tendon repair flexor zone 1 0 2 5 Tendon repair flexor zone 2 0 2 5 Tendon repair flexor zone 3-5 0 4 5 Wound closure 0 2 5 Delayed primary or secondary 1 4 5 Wound debridement 1 4 5 Wrist 0 3 5 Arthrodesis wrist (includes partial arthrodesis) 0 3 5 Arthroscopy wrist 0 3 5 5 De Quervain's decompression 3 5 5 De Quervain's decompression 1 5 5 Decompression / synovectomy tendons 0 3 5 Denervation wrist 0 </td <td>Split skin graft</td> <td>2</td> <td>4</td> <td>5</td>	Split skin graft	2	4	5
Tangential excision of hand burns 0 1 2 Tendon repair 0 2 5 Spaghetti wrist 0 2 5 Tendon repair extensor 2 5 5 Tendon repair flexor zone 1 0 2 5 Tendon repair flexor zone 2 0 2 5 Tendon repair flexor zone 3-5 0 4 5 Wound closure 0 2 5 Delayed primary or secondary 1 4 5 Wound debridement 1 4 5 Elective Hand 1 4 5 Wrist 0 3 5 Arthrodesis wrist (includes partial arthrodesis) 0 3 5 De Quervain's decompression 3 5 5 De Quervain's decompression 1 5 5 Decompression / synovectomy tendons 0 3 5 Decompression / synovectomy tendons 0 3 5 Denervation wrist 0 3 5 Denervation wrist 0 </td <td>Transposition flap</td> <td>0</td> <td>2</td> <td>3</td>	Transposition flap	0	2	3
Tendon repair Image: March Spaghetti wrist Image: March March Spaghetti wrist Image: M	Tangential excision of hand burns	0	1	2
Tendon repair 0 2 5 Spaghetti wrist 0 2 5 5 Tendon repair extensor 2 5 5 Tendon repair flexor zone 1 0 2 5 Tendon repair flexor zone 2 0 2 5 Tendon repair flexor zone 3-5 0 4 5 Wound closure 0 2 5 Delayed primary or secondary 1 4 5 Wound debridement 1 4 5 Elective Hand 1 4 5 Wrist 0 3 5 Arthrodesis wrist (includes partial arthrodesis) 0 3 5 De Quervain's decompression 3 5 5 De Quervain's decompression 1 5 5 Decompression / synovectomy tendons 0 3 5 Decompression / synovectomy tendons 0 3 5 Decompression distal ulna 0 4 5				
Spagnetti wrist 0 2 5 Tendon repair extensor 2 5 5 Tendon repair flexor zone 1 0 2 5 Tendon repair flexor zone 2 0 2 5 Tendon repair flexor zone 3-5 0 4 5 Wound closure - - - Delayed primary or secondary 1 4 5 Wound debridement 1 4 5 Wrist - - - Arthrodesis wrist (includes partial arthrodesis) 0 3 5 De Quervain's decompression 3 5 5 De Quervain's ducompression / synovectomy tendons 0 3 5 Denervation wrist 0 3 5 5		0	0	-
Tendon repair filexor zone 1 0 2 5 Tendon repair filexor zone 2 0 2 5 Tendon repair filexor zone 2 0 2 5 Tendon repair filexor zone 3-5 0 4 5 Wound closure 0 2 5 Delayed primary or secondary 1 4 5 Wound debridement 1 4 5 Elective Hand 1 4 5 Wrist 0 3 5 Arthroscopy wrist 0 3 5 De Quervain's decompression 1 5 5 Decompression / synovectomy tendons 0 3 5 Denervation wrist 0 3 5 Denervation wrist 0 3 5 Decompression / synovectomy tendons 0 3 5 Decompression / synovect		0	2	5
Tendon repair flexor zone 1 0 2 5 Tendon repair flexor zone 2 0 2 5 Tendon repair flexor zone 3-5 0 4 5 Wound closure 0 2 5 Delayed primary or secondary 1 4 5 Wound debridement 1 4 5 Elective Hand 1 4 5 Wrist 0 3 5 Arthrodesis wrist (includes partial arthrodesis) 0 3 5 De Quervain's decompression 1 5 5 Decompression / synovectomy tendons 0 3 5 Denervation wrist 0 3 5 Excision distal ulna 0 4 5		2	5	5
Tendon repair flexor zone 2025Tendon repair flexor zone 3-5045Wound closure145Delayed primary or secondary145Wound debridement145Elective Hand145Wrist145Arthrodesis wrist (includes partial arthrodesis)035Carpal tunnel decompression355De Quervain's decompression155Decompression / synovectomy tendons035Denervation wrist035Excision distal ulna045		0	2	5
Tendon repair flexor zone 3-5045Wound closureDelayed primary or secondary145Wound debridement145Elective HandWristArthrodesis wrist (includes partial arthrodesis)035Arthroscopy wrist025Carpal tunnel decompression355De Quervain's decompression155Denervation wrist035Denervation wrist035Excision distal ulna045		0	2	5
Wound closureImage: secondaryImage: secondaryDelayed primary or secondary145Wound debridement145Image: secondary145Image: secondary145Image: secondary145Image: secondary145Image: secondary145Image: secondary035Image: secondary035Image: secondary035Image: secondary155Image: secondary035Image: secondary045Image: secondary045Image: secondary045Image: secondary045Image: secondary045Image: secondary045Image: secondary045Image: secondary045Image: secondary	lendon repair flexor zone 3-5	0	4	5
Delayed primary or secondary145Wound debridement145Elective Hand145Wrist035Arthrodesis wrist (includes partial arthrodesis)035Arthroscopy wrist025Carpal tunnel decompression355De Quervain's decompression155Decompression / synovectomy tendons035Denervation wrist035Excision distal ulna045Carpaliton distal ulna045	Wound closure			
Dotayos primary or occordary1145Wound debridement145Elective HandImage: constraint of the second secon	Delayed primary or secondary	1	4	5
Elective HandImage: Constraint of the second se	Wound debridement	1	4	5
Elective HandImage: Constraint of the second se		-		•
Wrist035Arthrodesis wrist (includes partial arthrodesis)035Arthroscopy wrist025Carpal tunnel decompression355De Quervain's decompression155Decompression / synovectomy tendons035Denervation wrist035Excision distal ulna045Carpalian averiation at wrist255	Elective Hand			
Arthrodesis wrist (includes partial arthrodesis)035Arthroscopy wrist025Carpal tunnel decompression355De Quervain's decompression155Decompression / synovectomy tendons035Denervation wrist035Excision distal ulna045Carpalion excision at wrist255	Wrist			
Arthroscopy wrist025Carpal tunnel decompression355De Quervain's decompression155Decompression / synovectomy tendons035Denervation wrist035Excision distal ulna045Cappelion excision at wrist255	Arthrodesis wrist (includes partial arthrodesis)	0	3	5
Carpal tunnel decompression355De Quervain's decompression155Decompression / synovectomy tendons035Denervation wrist035Excision distal ulna045Carpalian avairian at wrist255	Arthroscopy wrist	0	2	5
De Quervain's decompression155Decompression / synovectomy tendons035Denervation wrist035Excision distal ulna045Conglian excision at wrist255	Carpal tunnel decompression	3	5	5
Decompression / synovectomy tendons035Denervation wrist035Excision distal ulna045Conglian excision at wrist255	De Quervain's decompression	1	5	5
Denervation wrist035Excision distal ulna045Conglian excision at wrist255	Decompression / synovectomy tendons	0	3	5
Excision distal ulna 0 4 5	Denervation wrist	0	3	5
Conglian availation at writet	Excision distal ulna	0	4	5
	Ganglion excision at wrist	2	5	5

Торіс	EARLY YEARS	T&O SPECIALTY TRAINING	SPECIALTY INTEREST
Proximal row carpectomy	0	2	5
Radial shortening	0	2	5
Surgery for chronic carpal instability	0	2	5
TFCC			
Repair TFCC - arthroscopic	0	2	5
Repair TFCC - open	0	2	5
Ulna shortening	0	3	5
Ulnar nerve decompression at wrist	0	3	5
Wrist arthroplasty	0	2	5
Hand			
Carpal tunnel decompression	3	5	5
Congenital hand operation			
Congenital hand operation - clinodactyly	0	1	4
Congenital hand operation - complex reconstruction of congenital hand deformity	0	1	2
Congenital hand operation - camptodactyly	0	1	2
Congenital hand operation - correction of radial club hand	0	1	2
Congenital hand operation - lengthening procedures	0	1	2
Congenital hand operation - removal supernumerary digits	0	1	3
Congenital hand operation - separation of syndactyly	0	1	3
Dupuytren's contracture operation			
Dupuytrens contracture operation - dermofasciectomy	0	2	5
Dupuytren's contracture operation - primary multiple digits	0	3	5
Dupuytren's contracture operation - primary single digit	0	3	5
Dupuytren's contracture operation - recurrent multiple digits	0	2	5
Dupuytren's contracture operation - recurrent single digit	0	2	5
		<u> </u>	-
	0	3	5
Finger malunion correction or other deformity	0	2	5
	0	3	5
DID Long la coment	0	2	5
PIPJ replacement - nand (otner)	0	2	5
PIPJ replacement - hand (silastic)	0	2	5
Soft tissue reconstruction hand	0	2	5
Synovectomy	0	3	5
Tandan maaaduraa			
Tenden srett head	0	2	5
	0	2	5
	0	2	5
	0	2	5
renosynovectomy	U	2	5

Торіс	EARLY YEARS	T&O SPECIALTY TRAINING	SPECIALTY INTEREST
Trapezium excision or replacement	0	3	5
Trigger finger release	2	5	5
Trigger thumb release	1	5	5

Applied Clinical Skills: Hip

A trainee must be able to demonstrate their competence in the procedures below at the appropriately marked level and stage of training.		
	Competence Levels	
0 = No experience expected	3 = Can manage whole but may need assistance	
1 = Has observed or knows of	4 = Able to manage without assistance including potential common complications	
2 = Can manage with assistance	5 = Able to manage complex cases and their associated potential complications	

Торіс	EARLY YEARS	T&O SPECIALTY TRAINING	SPECIALTY INTEREST
Trauma Hip			
Pelvis			
Acetabular fracture ORIF	0	2	4
Pelvic fracture:			
Pelvic fracture external fixator application	1	3	5
Pelvic fracture ORIF	0	2	5
Sacroiliac joint percutaneous screw fixation	0	1	5
Sacrum ORIF	0	1	4
Нір			
Dislocated hip			
Dislocated hip (no prosthesis) - closed reduction	1	4	5
Dislocated hip (no prosthesis) - open reduction +/- fixation	0	3	5
Dislocated hip hemiarthroplasty - closed reduction	2	4	5
Dislocated hip hemiarthroplasty - open reduction	0	4	5
Dislocated total hip replacement - closed reduction	2	4	5
Dislocated total hip replacement - open reduction	0	4	5
Extracapsular fracture			
Extracapsular fracture CHS / DHS	3	5	5
Extracapsular fracture intramedullary fixation	0	5	5
Extracapsular fracture other fixation	0	4	5
Intracapsular fracture			
Intracapsular fracture bipolar hemiarthroplasty	0	5	5
Intracapsular fracture hemiarthroplasty excluding bipolar	2	5	5
Intracapsular fracture internal fixation	1	5	5
Intracapsular fracture THR	1	4	5
Irrigation and debridement native joint for infection - hip	0	4	5
Irrigation and debridement prosthesis for infection - hip	0	4	5

Торіс	EARLY YEARS	T&O SPECIALTY TRAINING	SPECIALTY INTEREST
Periprosthetic fracture of hip			
Open reduction and fixation of periprosthetic fracture - hip	0	3	5
Revision THR for periprosthetic fracture of hip	0	2	5
Femur			
Diaphyseal fracture			
Diaphyseal femur fracture application of external fixator	0	3	5
Diaphyseal femur fracture intramedullary nailing	0	5	5
Diaphyseal femur fracture plate/screw fixation	0	4	5
Diaphyseal femur fracture spica cast application	0	3	3
Fasciotomy for compartment syndrome	1	4	5
Femeral non-union			
Femoral non-union	0	2	Б
Femoral non-union (application of frame) +/- bone granting	0	2	5
Periodal non-union (without frame) +/- bone graning	0	2	5
	0	1	5
Subtrochanteric fracture			
Subtrochanteric fracture intramedullary fixation	0	4	5
Subtrochanteric fracture plate/screw fixation	0	3	5
Pervis	0	2	F
Sacrococygeal joint injection	0	2	5
	0	3	5
Нір			
Adductor tenotomy - hip	0	3	5
Arthrodesis hip	0	2	5
Arthroscopy hip - diagnostic	0	1	5
Arthroscopy hip - therapeutic	0	1	5
Arthrotomy hip	0	3	5
Aspiration / injection hip joint	0	3	5
Excision arthroplasty hip (e.g. Girdlestone)	0	3	5
Femoral head AVN			
Core decompression of femoral head for AVN	0	3	5
Vascular graft femoral head for AVN	0	2	3
remeroacetabular impingement			
Open nip debridement for remeroacetabular impingement Syndrome	0	1	4
lliopsoas release / lengthening	0	2	5
Osteotomy pelvis - not for DDH	0	1	3

Торіс	EARLY YEARS	T&O SPECIALTY TRAINING	SPECIALTY INTEREST
Revision THR			
1 stg of 2 stg rev infected THR - removal of prosthesis +/-insertion of cement spacer / antibiotic beads	0	2	5
2 stg of 2 stg rev infected THR - removal of spacer/beads	0	2	5
Single stage revision THR acetabular component	0	2	5
Single stage revision THR both components	0	2	5
Single stage revision THR femoral component		2	5
Total Hip Replacement			
THR cemented	1	4	5
THR hybrid	1	4	5
THR surface replacement	1	2	5
THR uncemented	1	4	5
Femur			
Endoprosthetic replacement for malignant bone tumour - femur	1	2	4
Femoral malunion correction or other deformity	0	2	4
Osteotomy corrective (not for DDH)	0	2	4

Applied Clinical Skills: Knee

A trainee must be able to demonstrate their competence in the procedures below at the appropriately marked level and stage of training.		
	Competence Levels	
0 = No experience expected	3 = Can manage whole but may need assistance	
1 = Has observed or knows of	4 = Able to manage without assistance including potential common complications	
2 = Can manage with assistance	5 = Able to manage complex cases and their associated potential complications	

Торіс	EARLY YEARS	T&O SPECIALTY TRAINING	SPECIALTY INTEREST
Trauma Knee			
Knee			-
Acute arthroscopy for knee trauma	0	3	5
Application of spanning external fixator	0	2	5
Intraarticular fracture distal femur ORIF	0	3	5
Irrigation and debridement native joint for infection (open or arthroscopic) - knee	1	4	5
Irrigation and debridement prosthesis for infection - knee	1	4	5
Knee MUA +/- POP	2	5	5
Patella fracture			
Patella dislocation closed reduction +/- open repair	1	4	5
Patella fracture ORIF	0	4	5
Patellectomy	0	4	5
Devices of the first function of the sec			
Periprostnetic fracture of knee	0	0	
Open reduction and fixation of periprostnetic tracture - knee	0	2	5
Revision TKR for periprostnetic tracture of knee	0	3	5
Soft tissue repair			
Acute ligament repair	0	3	5
Patella tendon repair	0	4	5
Quadriceps tendon repair	0	4	5
Supracondular fracture (not intraarticular)			
Supracondular fracture (not intraaticular)	0	1	5
Supracondular famur fracture (not intraarticular) DCS / blade plate etc	0	4	5
Supracondular femur fracture (not intraarticular) external invation	0	4	5
Supracondular famur fracture (not intraarticular) MIIA & DOD	0	4 /	5
	0	+	5
Tibial plateau fracture			
Repair of tibial spine	0	3	5

Торіс	EARLY YEARS	T&O SPECIALTY TRAINING	SPECIALTY INTEREST
Tibial plateau fracture arthroscopically assisted fixation	0	2	5
Tibial plateau fracture ORIF with plates & screws	0	4	5
Tibial plateau fracture treatment with circular frame	0	2	4
Tibia & Fibula			
Diaphyseal tibial fracture			
Diaphyseal tibial fracture external fixation (including frame)	1	3	5
Diaphyseal tibial fracture intramedullary nailing	1	4	5
Diaphyseal tibial fracture MUA & POP	1	5	5
Tibial shaft plating	0	3	5
Fasciotomy for compartment syndrome	2	5	5
Tibial nan unian			
Tibial non-union	0	2	2
	0	2	<u> </u>
Tibial non-union initialiteduliary fialining +/- bone gratting	0	2	<u> </u>
	0	2	3
Elective Knee			
Knee			
Arthroscopic partial meniscectomy	1	5	5
Arthroscopic procedures			
Arthroscopic excision of Hoffa's fat pad	0	4	5
Arthroscopic lateral release	0	4	5
Arthroscopic menisectomy	0	5	5
Arthroscopic removal loose bodies knee	0	4	5
Arthroscopic synovectomy	0	3	5
Arthroscopy knee diagnostic	1	5	5
Meniscal repair (arthroscopic)	0	3	5
Aspiration / injection knee joint	2	5	5
Below knee amputation	1	4	5
Cartilage regeneration procedures			
Abrasion arthroplasty / microfracture - knee	0	2	5
Mosaicplasty - knee	0	2	4
Osteochondral allografting - knee	0	2	4
Autologous chondrocyte implantation	0	2	5
Knee arthroplasty			
Patella resurfacing alone	0	1	3
Patello-remoral joint replacement	0	1	3
TKR	1	4	5
Unicompartmental knee replacement	0	3	5
MUA knee	2	4	5
Osteotomy distal femoral	0	2	4

Торіс	EARLY YEARS	T&O SPECIALTY TRAINING	SPECIALTY INTEREST
Osteotomy proximal tibial	0	2	5
Patella realignment	0	3	5
Patella tendon decompression (open / arthroscopic)	0	3	5
Release contracture knee	0	2	4
Revision TKR			
1 stg of 2 stg rev infected TKR - removal of prosthesis +/- insertion of cement spacer / antibiotic beads	0	2	5
2 stg of 2 stg rev infected TKR - removal of spacer/beads	0	2	5
Revision TKR for periprosthetic fracture of knee	0	2	5
Single stage revision TKR	0	2	5
Soft tissue reconstruction			
ACL reconstruction - arthroscopic	0	2	5
ACL reconstruction - open	0	2	5
Reconstruction of posterolateral corner of knee	0	2	5
PCL reconstruction	0	2	5
Revision ACL reconstruction	0	1	5
TKR	1	4	5
Tibia & Fibula			
Endoprosthetic replacement for malignant bone tumour - tibia	1	2	3
Tibia or fibula malunion correction or other deformity	0	2	4
Tibial lengthening	0	1	2

Applied Clinical Skills: Foot and Ankle

A trainee must be able to demo	onstrate their competence in the procedures below at the appropriately marked level and stage of training.
	Competence Levels
0 = No experience expected	3 = Can manage whole but may need assistance
1 = Has observed or knows of	4 = Able to manage without assistance including potential common complications
2 = Can manage with assistance	5 = Able to manage complex cases and their associated potential complications

Торіс	EARLY YEARS	T&O SPECIALTY TRAINING	SPECIALTY INTEREST
Trauma Foot and Ankle			
Ankle			
Ankle fracture / dislocation:			
Ankle fracture / dislocation MUA & POP	3	5	5
Ankle fracture / dislocation ORIF	3	5	5
Application of spanning external fixator	0	2	5
Irrigation and debridement native joint for infection - ankle	1	3	5
Irrigation and debridement prosthesis for infection - ankle	0	2	5
Pilon fracture			
Pilon fracture ex-fix	0	2	5
Pilon fracture ORIF	0	2	5
Pilon fracture treatment with circular frame	0	2	5
Foot			
Amputation toe / ray for trauma	0	3	5
Calcaneal fracture			
Calcaneal fracture ex-fix	0	2	5
Calcaneal fracture ORIF	0	2	5
Metatarsal fracture ORIF	0	2	5
Phalangeal fracture MUA +/- K wire +/- ORIF	1	3	5
Removal foreign body from skin / subcutaneous tissue	2	5	5
Talar subtalar or midtarsal fracture / dislocation			
	0	3	5
Midtarsal fracture / dislocation ORIE	0	3	5
Subtalar fracture / dislocation ORIF	0	3	5
Talar fracture / dislocation ORIE	0	3	5
Talectomy	0	1	3
Tarsometatarsal arthrodesis	0	2	5
	_		-

Торіс	EARLY YEARS	T&O SPECIALTY TRAINING	SPECIALTY INTEREST
Achilles tendon repair	1	4	5
Tendon repair in foot	0	3	5
Elective Foot and Ankle			
Ankle			
Arthrodesis ankle (open /arthroscopic)	0	2	5
Arthroplasty ankle	0	2	4
Arthroscopic procedures			
Arthrodesis ankle - arthroscopic	0	1	4
Arthroscopy ankle diagnostic	0	2	5
Arthroscopy ankle therapeutic	0	2	4
Arthrotomy ankle	0	2	5
Aspiration / injection ankle joint	0	4	5
Ligament repair / reconstruction			
Ankle - lateral ligament reconstruction	0	2	5
Ankle - lateral ligament repair	0	2	5
Ankle - medial ligament repair	0	2	5
Pantalar arthrodesis	0	2	5
Tendon procedures			
Decompression tendons at ankle		2	5
Gastrocnemius lengthening		3	5
Tendo achilles reconstruction for neglected rupture		2	5
		4	5
		0	-
Akin osteotomy of proximal phalanx great toe	0	2	5
Amputation toe / ray	0	3	5
Ankle chielectomy		2	5
	0	2	F
	0	2	5
Midtoreal	0	2	5
Midtarsal		2	5
Foreroot and toes		2	5
		2	5
Excision Hadlund's deformity		2	5
Excision of accessory navicular		2	5
Excision of targal coalition		2	5
Excision of tarsal coalition		<u> </u>	5
First metatarsal osteotomy			
First metatarsal osteotomy - basal		2	5
First metatarsal osteotomy - distal		3	5

Торіс	EARLY YEARS	T&O SPECIALTY TRAINING	SPECIALTY INTEREST
First metatarsal osteotomy – other	0	3	5
First metatarsal osteotomy - Scarf	0	3	5
First MTPJ procedures			
First MTPJ arthrodesis	0	3	5
First MTPJ cheilectomy	0	3	5
First MTPJ excision arthroplasty	0	3	5
First MTPJ replacement arthroplasty (silastic or other)	0	2	4
First MTPJ soft tissue correction	0	3	5
Foot malunion correction or other deformity	0	2	4
Forefoot arthroplasty (Mann Thompson / Stainsby / Other		2	5
Ingrowing toenail operation		5	5
Lesser metatarsal osteotomy		2	5
Lesser toe excision part/all phalanx		3	5
MTPJ cheilectomy - not 1st		3	5
Soft tissue procedures			
Excision of Morton's neuroma	0	3	5
Fifth toe soft tissue correction		3	5
Lesser toe tenotomy		3	5
Plantar fascia release		3	5
Tendon decompression or repair		3	5
Tendon transfer foot		3	5
Tibialis posterior reconstruction		3	5
Talectomy	0	2	5
Wedge tarsectomy	0	2	5

Applied Clinical Skills: Children's Trauma and Orthopaedics

A trainee must be able to demonstrate their competence in the procedures below at the appropriately marked level and stage of training.

Competence Levels		
0 = No experience expected 3 = Can manage whole but may need assistance		
1 = Has observed or knows of	4 = Able to manage without assistance including potential common complications	
2 = Can manage with assistance	5 = Able to manage complex cases and their associated potential complications	

Торіс	EARLY YEARS	T&O SPECIALTY TRAINING	SPECIALTY INTEREST
Trauma Paediatrics			
Supracondylar elbow fracture			_
Supracondylar elbow fracture MUA +/- percutaneous wires	1	4	5
Supracondylar elbow fracture open reduction	0	3	5
Forearm fractures			
Manipulation and POP forearm	1	5	5
Manipulation and K wire forearm	0	4	5
Titanium elastic nailing paediatric long bone	0	2	5
	0	2	0
Slipped upper femoral epiphysis			
Dunn procedure for slipped upper femoral epiphysis	0	2	5
Slipped upper femoral epiphysis percutaneous cannulated screw fixation	0	2	5
Drainage of septic arthritis of the hip		2	5
Repair of avulsion of tibial eminence	0	2	5
ORIF paediatric ankle fracture		4	5
Obstetric brachial plexus injury: exploration / repair / grafting	0	1	2
Elective Paediatrics			
Cerebral Palsy			
Adductor tenotomy - hip	0	2	5
Botulinum toxin injection - musculoskeletal	0	2	5
Hamstring lengthening		2	5
Iliopsoas release / lengthening		2	5
MTPJ arthrodesis		2	5
Patella realignment		2	5
Steindler's release	0	1	5
Tendo-achilles lengthening		2	5
I endon transfer foot	0	1	5
I endon transfer not hand / foot	0	1	5
CIEV correction			

Торіс	EARLY YEARS	T&O SPECIALTY TRAINING	SPECIALTY INTEREST
Arthrodesis for recurrence for CTEV	0	1	5
Bony release for recurrence for CTEV	0	1	5
CTEV correction	0	1	5
Ilizarov correction for CTEV	0	1	5
Percutaneous tendo-achilles release for CTEV	0	2	5
Posterior release for CTEV	0	1	5
Postero-medial release for CTEV	0	1	5
Soft tissue release for recurrence for CTEV	0	1	5
Tibilialis anterior transfer for CTEV	0	1	5
DDH			
Application of hip spica	0	2	5
Нір МUА		2	5
Open reduction for DDH		1	5
Osteotomy hip - pelvic for DDH		1	5
Osteotomy hip - proximal femoral for DDH	0	1	5
Distraction lengthening of bone upper limb	0	1	5
Excision of physeal bar (Langenskjold procedure)		1	5
Femoral lengthening		1	5
GA change of POP		3	5
Repair of avulsion of tibial eminence (child)		2	5
Sternomastoid release (torticollis)		1	5
Tibial lengthening	0	1	5

Professional Behaviour & Leadership Skills



PROFESSIONAL BEHAVIOUR AND LEADERSHIP SYLLABUS

Professional behaviour and leadership skills are integral to the specialty specific syllabuses relating to clinical practice. It is not possible to achieve competence within the specialty unless these skills and behaviours are evident. Professional behaviour and leadership skills are evidenced through clinical practice. By the end of each stage of training, the trainee must be able to demonstrate progress in acquiring these skills and demonstrating these behaviours across a range of situations as detailed in the syllabus.

	PROFESSIONAL BEHAVIOUR AND LEADERSHIP
Category	Good Clinical Care, to include:
	 History taking Physical examination Time management and decision making Clinical reasoning Therapeutics and safe prescribing Patient as a focus of clinical care Patient safety Infection control
Objective	To achieve an excellent level of care for the individual patient
	 To elicit a relevant focused history To perform focused, relevant and accurate clinical examination To formulate a diagnostic and therapeutic plan for a patient based upon the clinic findings To prioritise the diagnostic and therapeutic plan To communicate a diagnostic and therapeutic plan appropriately
	To produce timely, complete and legible clinical records to include case-note records, handover notes, and operation notes
	To prescribe, review and monitor appropriate therapeutic interventions relevant to clinical practice including non – medication based therapeutic and preventative indications
	To prioritise and organise clinical and clerical duties in order to optimise patient care
	To make appropriate clinical and clerical decisions in order to optimise the effectiveness of the clinical team resource.
	To prioritise the patient's agenda encompassing their beliefs, concerns

	expectations and needs
	To prioritise and maximise patient safety:
	 To understand that patient safety depends on The effective and efficient organisation of care Health care staff working well together Safe systems, individual competency and safe practice To understand the risks of treatments and to discuss these honestly and openly with patients To understand the systematic ways of assessing and minimising risk To ensure that all staff are aware of risks and work together to minimise risk
	To manage and control infection in patients, including:
	 Controlling the risk of cross-infection Appropriately managing infection in individual patients Working appropriately within the wider community to manage the risk posed by communicable diseases
	Patient assessment
Knowledge	 Knows likely causes and risk factors for conditions relevant to mode of procentation
	 Understands the basis for clinical signs and the relevance of positive and
	negative physical signs
	 Recognises constraints and limitations of physical examination Recognises the role of a chaperone is appropriate or required
	 Understand health needs of particular populations e.g. ethnic minorities Recognises the impact of health beliefs, culture and ethnicity in presentations of physical and psychological conditions
	Clinical reasoning
	 Interpret history and clinical signs to generate hypothesis within context of clinical likelihood
	Understands the psychological component of disease and illness
	 Test, refine and verify hypotheses
	Develop problem list and action plan
	 Recognise how to use expert advice, clinical guidelines and algorithms Recognise and appropriately respond to sources of information accessed
	by patients
	• Recognises the need to determine the best value and most effective treatment both for the individual patient and for a patient cohort
	Record keeping

 Understands local and national guidelines for the standards of clinical record keeping and relevance of high quality and adequate clinical record keeping and relevance to patient safety and to litigation Understand the importance of confidentiality Time management Understand that effective organisation is key to time management Understand that some tasks are more urgent and/or more important than others Understand the need to prioritise work according to urgency and importance Maintains focus on individual patient needs whilst balancing multiple competing pressures Outline the character of material states Outline the features of a safe working environment Understand principles of risk assessment and management Understand principles of risk assessment and management Understand get prescription Outline local procedures and protocols for optimal practice in the personal, clinical and organisational settings Outline local procedures and protocols for optimal practice e.g. Gl bleed protocol, safe prescription Understands the investigation of significant events, serious untoward incidents and near misses Infection control Understands the principles of infection control Understands the principles of preventing infection in high risk groups Takes a history from a patient with appropriate use of standardised questionnaires and with appropriate input from other parties including family members, carers and other health professionals Performs an examination relevant to the presentation and risk factors that is valid, targeted and time efficient and which actively elicits important clinical findings Give adequate time for patients and carers to express their beliefs ideas, concerns mad expectations Respond to questions honestly and seek advice		
 Outline techniques for improving time management Outline techniques for improving time management Patient safety Outline the features of a safe working environment Outline the hazards of medical equipment in common use Understand principles of risk assessment and management Understanding the components of safe working practice in the personal, clinical and organisational settings Outline local procedures and protocols for optimal practice e.g. GI bleed protocol, safe prescribing Understands the investigation of significant events, serious untoward incidents and near misses Infection control Understand the principles of infection control Understands the principles of preventing infection in high risk groups Skills Patient assessment Takes a history from a patient with appropriate use of standardised questionnaires and with appropriate input from other parties including family members, carers and other health professionals Performs an examination relevant to the presentation and risk factors that is valid, targeted and time efficient and which actively elicits important clinical findings Give adequate time for patients and carers to express their beliefs ideas, concerns and expectations Respond to questions honestly and seek advice if unable to answer Develop a self-management plan with the patient 		 Understands local and national guidelines for the standards of clinical record keeping in all circumstances, including handover Understanding of the importance of high quality and adequate clinical record keeping and relevance to patient safety and to litigation Understand the importance of confidentiality Time management Understand that effective organisation is key to time management Understand that some tasks are more urgent and/or more important than others Understand the need to prioritise work according to urgency and importance
Patient safety • Outline the features of a safe working environment • Outline the hazards of medical equipment in common use • Understand principles of risk assessment and management • Understanding the components of safe working practice in the personal, clinical and organisational settings • Outline local procedures and protocols for optimal practice e.g. GI bleed protocol, safe prescribing • Understands the investigation of significant events, serious untoward incidents and near misses Infection control • Understand the principles of infection control • Understand the principles of preventing infection in high risk groups • Skills Patient assessment • Takes a history from a patient with appropriate use of standardised questionnaires and with appropriate input from other parties including family members, carers and other health professionals • Performs an examination relevant to the presentation and risk factors that is valid, targeted and time efficient and which actively elicits important clinical findings • Give adequate time for patients and carers to express their beliefs ideas, concerns and expectations • Respond to questions honestly and seek advice if unable to answer • Develop a self-management plan with the patient		 Outline techniques for improving time management
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Infection control • Understand the principles of infection control • Understands the principles of preventing infection in high risk groups • Skills Patient assessment • Takes a history from a patient with appropriate use of standardised questionnaires and with appropriate input from other parties including family members, carers and other health professionals • Performs an examination relevant to the presentation and risk factors that is valid, targeted and time efficient and which actively elicits important clinical findings • Give adequate time for patients and carers to express their beliefs ideas, concerns and expectations • Respond to questions honestly and seek advice if unable to answer • Develop a self-management plan with the patient • Encourage patients to voice their preferences and personal choices		 Outline local procedures and protocols for optimal practice e.g. GI bleed protocol, safe prescribing Understands the investigation of significant events, serious untoward incidents and near misses
 Understand the principles of infection control Understands the principles of preventing infection in high risk groups Patient assessment Takes a history from a patient with appropriate use of standardised questionnaires and with appropriate input from other parties including family members, carers and other health professionals Performs an examination relevant to the presentation and risk factors that is valid, targeted and time efficient and which actively elicits important clinical findings Give adequate time for patients and carers to express their beliefs ideas, concerns and expectations Respond to questions honestly and seek advice if unable to answer Develop a self-management plan with the patient Encourage patients to voice their preferences and personal choices 		Infection control
Skills Patient assessment • Takes a history from a patient with appropriate use of standardised questionnaires and with appropriate input from other parties including family members, carers and other health professionals • Performs an examination relevant to the presentation and risk factors that is valid, targeted and time efficient and which actively elicits important clinical findings • Give adequate time for patients and carers to express their beliefs ideas, concerns and expectations • Respond to questions honestly and seek advice if unable to answer • Develop a self-management plan with the patient • Encourage patients to voice their preferences and personal choices		 Understand the principles of infection control Understands the principles of preventing infection in high risk groups
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 Performs an examination relevant to the presentation and risk factors that is valid, targeted and time efficient and which actively elicits important clinical findings Give adequate time for patients and carers to express their beliefs ideas, concerns and expectations Respond to questions honestly and seek advice if unable to answer Develop a self-management plan with the patient Encourage patients to voice their preferences and personal choices 		 Takes a history from a patient with appropriate use of standardised questionnaires and with appropriate input from other parties including family members, carers and other health professionals
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 Develop a self-management plan with the patient Encourage patients to voice their preferences and personal choices 		 Respond to questions honestly and seek advice if unable to answer
		 Develop a self-management plan with the patient Encourage patients to voice their preferences and personal choices

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	about their care
CI	inical reasoning
•	Interpret clinical features, their reliability and relevance to clinical scenarios including recognition of the breadth of presentation of common disorders Incorporates an understanding of the psychological and social elements of clinical scenarios into decision making through a robust process of clinical reasoning Recognise critical illness and respond with due urgency Generate plausible hypothesis(es) following patient assessment Construct a concise and applicable problem list using available information Construct an appropriate management plan in conjunction with the patient, carers and other members of the clinical team and communicate this effectively to the patient, parents and carers where relevant
Re	ecord keeping
•	Producing legible, timely and comprehensive clinical notes relevant to the setting Formulating and implementing care plans appropriate to the clinical situation, in collaboration with members of an interdisciplinary team,
•	Incorporating assessment, investigation, treatment and continuing care Presenting well documented assessments and recommendations in written and/or verbal form
Ті	me management
•	Identifies clinical and clerical tasks requiring attention or predicted to arise
•	Group together tasks when this will be the most effective way of working Organise, prioritise and manage both team-members and workload effectively and flexibly
Pa	tient safety
• • •	Recognise and practise within limits of own professional competence Recognise when a patient is not responding to treatment, reassess the situation, and encourage others to do so Ensure the correct and safe use of medical equipment Improve patients' and colleagues' understanding of the side effects and contraindications of therapeutic intervention Sensitively counsel a colleague following a significant untoward event, or near incident, to encourage improvement in practice of individual and unit Recognise and respond to the manifestations of a patient's deterioration or lack of improvement (symptoms, signs, observations, and laboratory

	results) and support other members of the team to act similarly
	 Infection control Recognise the potential for infection within patients being cared for Counsel patients on matters of infection risk, transmission and control
	 Actively engage in local infection control procedures Prescribe antibiotics according to local guidelines and work with microbiological services where appropriate Recognise potential for cross-infection in clinical settings Practice aseptic technique whenever relevant
Behaviour	 Ensures that patient assessment, whilst clinically appropriate considers social, cultural and religious boundaries Support patient self-management Recognise the duty of the medical professional to act as patient advocate Ability to work flexibly and deal with tasks in an effective and efficient fashion Remain calm in stressful or high pressure situations and adopt a timely, rational approach Show willingness to discuss intelligibly with a patient the notion and difficulties of prediction of future events, and benefit/risk balance of therapeutic intervention Show willingness to adapt and adjust approaches according to the beliefs and preferences of the patient and/or carers Be willing to facilitate patient choice Demonstrate ability to identify one's own biases and inconsistencies in clinical reasoning Continue to maintain a high level of safety awareness and consciousness Encourage feedback from all members of the team on safety issues Reports serious untoward incidents and near misses and co-operates with the investigation of the same. Show willingness to take action when concerns are raised about performance of members of the healthcare team, and act appropriately when these concerns are voiced to you by others Continue to be aware of one's own limitations, and operate within them Encourage all staff, patients and relatives to observe infection control principles Recognise the risk of personal ill-health as a risk to patients and
	Patient assessment
Examples and descriptors	 Obtains, records and presents accurate clinical history and physical examination relevant to the clinical presentation, including an indication of patient's views Uses and interprets findings adjuncts to basic examination appropriately
for Early Years Training	 e.g. internal examination, blood pressure measurement, pulse oximetry, peak flow Responds honestly and promptly to patient questions
	 Knows when to refer for senior help Is respectful to patients by Introducing self clearly to patients and indicates own place in team

	 Checks that patients comfortable and willing to be seen Informs patients about elements of examination and any procedures that the patient will undergo
	 Clinical reasoning In a straightforward clinical case develops a provisional diagnosis and a differential diagnosis on the basis of the clinical evidence, institutes an appropriate investigative and therapeutic plan, seeks appropriate support from others and takes account of the patient's wishes
	 Record keeping Is able to format notes in a logical way and writes legibly Able to write timely, comprehensive, informative letters to patients and to doctors
	 Time management Works systematically through tasks and attempts to prioritise Discusses the relative importance of tasks with more senior colleagues. Understands importance of communicating progress with other team members
	 Patient safety Participates in clinical governance processes Respects and follows local protocols and guidelines Takes direction from the team members on patient safety Discusses risks of treatments with patients and is able to help patients make decisions about their treatment Ensures the safe use of equipment Acts promptly when patient condition deteriorates Always escalates concerns promptly
	 Infection control Performs simple clinical procedures whilst maintaining full aseptic precautions Follows local infection control protocols Explains infection control protocols to students and to patients and their relatives Aware of the risks of nosocomial infections.
Examples and descriptors	 Patient assessment Undertakes patient assessment (including history and examination) under difficult circumstances. Examples include: Limited time available (Emergency situations, Outpatients, ward referral),
for T&O Specialty Training	 Severely ill patients Angry or distressed patients or relatives Recognises and deals with complex situations of communication, accommodates disparate needs and develops strategies to cope Is sensitive to patients cultural concerns and norms Is able to explain diagnoses and medical procedures in ways that enable patients understand and make decisions about their own health care
	 Clinical reasoning In a complex case, develops a provisional diagnosis and a differential

diagnosis on the basis of the clinical evidence, institutes an appropriate investigative and therapeutic plan, seeks appropriate support from others and takes account of the patient's wishes
Record keeping
 Produces comprehensive, focused and informative records which summarise complex cases accurately
Time management
 Organises, prioritises and manages daily work efficiently and effectively Works with, guides, supervises and supports junior colleagues Starting to lead and direct the clinical team in effective fashion
Patient safety
 Leads team discussion on risk assessment risk management clinical
incidents
 Works to make organisational changes that will reduce risk and improve safety
 Promotes patients safety to more junior colleagues
 Recognises and reports untoward or significant events
Undertakes a root cause analysis
 Shows support for junior colleagues who are involved in untoward events
Infection control
 Performs complex clinical procedures whilst maintaining full aseptic
precautions
 Manages complex cases effectively in collaboration with infection control specialists

	PROFESSIONAL BEHAVIOUR AND LEADERSHIP
Category	Being a good communicator
	To include:
	 Communication with patients Breaking bad news Communication with colleagues
Objective	Communication with patients
	 To establish a doctor/patient relationship characterised by understanding, trust, respect, empathy and confidentiality
	 To communicate effectively by listening to patients, asking for and respecting their views about their health and responding to their concerns and preferences
	• To cooperate effectively with healthcare professionals involved in patient care
	To provide appropriate and timely information to patients and their

	families
	lamies
	Deceling had now
	Breaking bad news
	 To deliver bad news according to the needs of individual patients
	Communication with Colleagues
	• To recognise and accept the responsibilities and role of the doctor in
	relation to other healthcare professionals.
	• To communicate succinctly and effectively with other professionals as
	appropriate
	• To present a clinical case in a clear, succinct and systematic manner
Knowledge	Communication with nationts
Kilowiedge	Communication with patients
	 Understands questioning and listening techniques
	Understanding that poor communication is a cause of complaints/
	litigation
	Breaking bad news
	 In delivering bad news understand that:
	 The delivery of bad news affects the relationship with the patient
	 Patient have different responses to bad news
	 Bad news is confidential but the patient may wish to be
	accompanied
	 Once the news is given, patients are unlikely to take in anything
	else Deselves had a sure and have to use hat some full to be the still of the
	 Breaking bad news can be extremely stressful for both parties It is important to group and for booking bad news
	 It is important to prepare for breaking bad news
	Communication and working with colleagues
	Understand the importance of working with colleagues, in particular:
	 The roles played by all members of a multi-disciplinary team
	 The features of good team dynamics
	 The principles of effective inter-professional collaboration
	 The principles of confidentiality

Skills	 Communication with patients Establish a rapport with the patient and any relevant others (e.g. carers) Listen actively and question sensitively to guide the patient and to clarify information Identify and manage communication barriers, tailoring language to the individual patient and others and using interpreters when indicated Deliver information compassionately, being alert to and managing their and your emotional response (anxiety, antipathy etc.) Use, and refer patients to appropriate written and other evidence based information sources Check the patient's understanding, ensuring that all their concerns/questions have been covered Make accurate contemporaneous records of the discussion Manage follow-up effectively and safely utilising a variety of methods (e.g. phone call, email, letter) Provide brief advice on health and self care e.g. use of alcohol and drugs.
	• Ensure appropriate referral and communications with other healthcare professional resulting from the consultation are made accurately and in a timely manner
	Breaking bad news
	 Demonstrate to others good practice in breaking bad news Recognises the impact of the bad news on the patient, carer, supporters, staff members and self Act with empathy, honesty and sensitivity avoiding undue optimism or pessimism
	 Communication with colleagues Communicate with colleagues accurately, clearly and promptly Utilise the expertise of the whole multi-disciplinary team Participate in, and co-ordinate, an effectivehospital out of hours team Communicate effectively with administrative bodies and support organisations Prevent and resolve conflict and enhance collaboration
Behaviour	 Communication with patients Approach the situation with courtesy, empathy, compassion and professionalism Demonstrate and inclusive and patient centred approach with respect for the diversity of values in patients, carers and colleagues
	 Breaking bad news Behave with respect, honest ant empathy when breaking bad news Respect the different ways people react to bad news
	 Communication with colleagues Be aware of the importance of, and take part in, multi-disciplinary teamwork, including adoption of a leadership role Foster an environment that supports open and transparent communication between team members Ensure confidentiality is maintained during communication with the team

	• Be prepared to accept additional duties in situations of unavoidable and unpredictable absence of colleagues Act appropriately on any concerns about own or colleagues' health e.g. use of alcohol and/or other drugs.
Examples and descriptors for Early Years	 Conducts a simple consultation with due empathy and sensitivity and writes accurate records thereof Recognises when bad news must be imparted. Able to break bad news in planned settings following preparatory discussion with seniors Accepts his/her role in the healthcare team and communicates appropriately with all relevant team members
Examples and descriptors for T&O Specialist Training	 Shows mastery of patient communication in all situations, anticipating and managing any difficulties which may occur Able to break bad news in both unexpected and planned settings Fully recognises the role of, and communicates appropriately with, all relevant team members Predicts and manages conflict between members of the healthcare team Beginning to take leadership role as appropriate, fully respecting the skills, responsibilities and viewpoints of all team members

	PROFESSIONAL BEHAVIOUR AND LEADERSHIP
Category	Teaching and Training
Objective	 To teach to a variety of different audiences in a variety of different ways To assess the quality of the teaching To train a variety of different trainees in a variety of different ways To plan and deliver a training programme with appropriate assessments
Knowledge	 Understand relevant educational theory and principles relevant to medical education Understand the structure of an effective appraisal interview Understand the roles of the bodies involved in medical education Understand learning methods and effective learning objectives and outcomes Understand the appropriate course of action to assist a trainee in difficulty
Skills	 Critically evaluate relevant literature Vary teaching format and stimulus, appropriate to situation and subject Provide effective feedback and promote reflection

	 Conduct developmental conversations as appropriate e.g.: appraisal, supervision, mentoring Deliver effective lecture, presentation, small group and bedside teaching sessions Participate in patient education Lead departmental teaching programmes including journal clubs Recognise the trainee in difficulty and take appropriate action Be able to identify and plan learning activities in the workplace
Behaviour	 In discharging educational duties respect the dignity and safety of patients at all times Recognise the importance of the role of the physician as an educator Balances the needs of service delivery with education Demonstrate willingness to teach trainees and other health workers Demonstrates consideration for learners Acts to ensure equality of opportunity for students, trainees, staff and professional colleagues Encourage discussions with colleagues in clinical settings to share understanding Maintains honesty, empathy and objectivity during assessment
Examples and descriptors for Early Years Training	 Prepares appropriate materials to support teaching episodes Seeks and interprets simple feedback following teaching Supervises a medical student, nurse or colleague through a simple procedure Plans, develops and delivers small group teaching to medical students, nurses or colleagues
Examples and descriptors for T&O Specialist Training	 Performs a workplace based assessment including giving appropriate feedback Devises a variety of different assessments (eg MCQs) Appraises a medical student, nurse or colleague Acts as a mentor to a medical student, nurses or colleague Plans, develops and delivers educational programmes with clear objectives and outcomes Plans, develops and delivers an assessment programme to support educational activities

	PROFESSIONAL BEHAVIOUR AND LEADERSHIP
Category	Keeping up to date and understanding how to analyse information
	Including
	 <i>Ethical research</i> Evidence and guidelines Audit Personal development

Objective	 To understand the results of research as they relate to medical practise To participate in medical research To use current best evidence in making decisions about the care of patients To construct evidence based guidelines and protocols To complete an audit of clinical practice Actively seek opportunities for personal development To participate in continuous professional development activities
Knowledge	 Understands good practice in research Understands the principles of research governance Understands research methodology including qualitative, quantitative, bio-statistical and epidemiological research methods Understands of the application of statistics as applied to medical practise Outline sources of research funding Understands the principles of critical appraisal Understands guideline development together with their roles and limitations Understands the of audit in improving patient care and risk management Understands the audit cycle Understands the working and uses of national and local databases used for audit such as specialty data collection systems, cancer registries etc. To demonstrate knowledge of the importance of best practice,
Skills	 transparency and consistency Develops critical appraisal skills and applies these when reading literature Devises a simple plan to test a hypothesis Demonstrates the ability to write a scientific paper Obtains appropriate ethical research approval Uses literature databases Contribute to the construction, review and updating of local (and national) guidelines of good practice using the principles of evidence based medicine Designs, implements and completes audit cycles Contribute to local and national audit projects as appropriate To use a reflective approach to practice with an ability to learn from previous experience To use assessment, appraisal, complaints and other feedback to discuss and develop an understanding of own development needs
Behaviour	 Follows guidelines on ethical conduct in research and consent for research Keep up to date with national reviews and guidelines of practice Aims for best clinical practice at all times, responding to evidence based medicine while recognising the occasional need to practise outside clinical guidelines Recognise the need for audit in clinical practice to promote standard setting and quality assurance

	 To be prepared to accept responsibility Show commitment to continuing professional development
Examples and descriptors for Early Years Training	 Defines ethical research and demonstrates awareness of national guidelines Differentiates audit and research and understands the different types of research approach e.g. qualitative and quantitative Knows how to use literature databases Demonstrates good presentation and writing skills Participates in departmental or other local journal club Critically reviews an article to identify the level of evidence Attends departmental audit meetings Contributes data to a local or national audit Identifies a problem and develops standards for a local audit Describes the audit cycle and take an audit through the first steps Seeks feedback on performance from clinical supervisor/mentor/patients/carers/service users
Examples and descriptors for T&O Specialist Training	 Demonstrates critical appraisal skills in relation to the published literature Demonstrates ability to apply for appropriate ethical research approval Demonstrates knowledge of research organisation and funding sources Demonstrates ability to write a scientific paper Leads in a departmental or other local journal club Contributes to the development of local or national clinical guidelines or protocols Organise or lead a departmental audit meeting Lead a complete clinical audit cycle including development of conclusions, the changes needed for improvement, implementation of findings and re-audit to assess the effectiveness of the changes Seeks opportunity to visit other departments and learn from other professionals

	PROFESSIONAL BEHAVIOUR AND LEADERSHIP
Objective	Self-awareness and self-management
	 To recognise and articulate one's own values and principles, appreciating how these may differ from those of others To identify one's own strengths, limitations and the impact of their behaviour To identify their own emotions and prejudices and understand how these can affect their judgement and behaviour To obtain, value and act on feedback from a variety of sources To manage the impact of emotions on behaviour and actions To be reliable in fulfilling responsibilities and commitments to a consistently high standard To ensure that plans and actions are flexible, and take into account the needs and requirements of others
	 To plan workload and activities to fulfill work requirements and commitments with regard to their own personal health
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	Team working
	 To identify opportunities where working with others can bring added benefits
	• To work well in a variety of different teams and team settings by listening to others, sharing information, seeking the views of others, empathising with others, communicating well, gaining trust, respecting roles and expertise of others, encouraging others, managing differences of opinion, adopting a team approach
	Leadership
	• To develop the leadership skills necessary to lead teams effectively. These include:
	 Identification of contexts for change Application of knowledge and evidence to produce an evidence based challenge to systems and processes
	 Making decision by integrating values with evidence Evaluating impact of change and taking corrective action where necessary
	Principles of quality and safety improvement
	• To recognise the desirability of monitoring performance, learning from mistakes and adopting no blame culture in order to ensure high standards of care and optimise patient safety
	I o critically evaluate services
	I o identify where services can be improved
	To support and facilitate innovative service improvement
	Management and Healthcare culture
	To organise a task where several competing priorities may be involved
	To actively contribute to plans which achieve service goals
	 To manage resources effectively and safely
	 To manage people effectively and safely
	 I o manage performance of themselves and others To understand the structure of the local Health Service
	Self awareness and self management
Knowledge	 Demonstrate knowledge of ways in which individual behaviours impact on others;
	Demonstrate knowledge of personality types, group dynamics, learning styles, leadership styles
	Demonstrate knowledge of methods of obtaining feedback from others

 Demonstrate knowledge of tools and techniques for managing stress Demonstrate knowledge of the role and responsibility of occupational health and other support networks
 Team working Outline the components of effective collaboration and team working Demonstrate knowledge of specific techniques and methods that facilitate effective and empathetic communication Demonstrate knowledge of techniques to facilitate and resolve conflict Describe the roles and responsibilities of members of the multidisciplinary team Outline factors adversely affecting a doctor's and team performance and methods to rectify these Demonstrate knowledge of different leadership styles
Leadership
 Understand the responsibilities of clinical leaders. Understand the function and responsibilities of national health regulation bodies. Demonstrate knowledge of patient outcome reporting systems within surgery, and the organisation and how these relate to national programmes. Understand how decisions are made by individuals, teams and the organisation Understand effective communication strategies within organisations
Quality and safety improvement
 Understand the elements of clinical governance and its relevance to clinical care Understands significant event reporting systems relevant to surgery Understands the importance of evidence-based practice in relation to clinical effectiveness Understand risks associated with the surgery including mechanisms to reduce risk Outline the use of patient early warning systems to detect clinical deterioration Keep abreast of national patient safety initiatives. Understand quality improvement methodologies including feedback from patients, public and staff Understand the role of audit, research, guidelines and standard setting in improving quality of care Understand methodology of creating solutions for service improvement Understand the implications of change

	Self awareness and self management
Skills	 Demonstrate the ability to maintain and routinely practice critical self awareness, including able to discuss strengths and weaknesses with supervisor, recognising external influences and changing behaviour accordingly
	 Demonstrate the ability to show awareness of and sensitivity to the way in which cultural and religious beliefs affect approaches and decisions, and to respond respectfully
	 Demonstrate the ability to recognise the manifestations of stress on self and others and know where and when to look for support Demonstrate the ability to balance personal and professional roles and responsibilities, prioritise tasks, having realistic expectations of what can be completed by self and others
	Team working
	 Preparation of patient lists with clarification of problems and ongoing
	care plan
	 Detailed handover between shifts and areas of care if relevant Communicate effectively in the resolution of conflict, providing feedback Develop effective working relationships with colleagues within the multidisciplinary team
	 Demonstrate leadership and management in the following areas: Education and training of junior colleagues and other members of the team
	 Deteriorating performance of colleagues (e.g. stress, fatigue) Effective handover of care between shifts and teams Lead and participate in interdisciplinary team meetings
	 Provide appropriate supervision to less experienced colleagues
	 Timely preparation of tasks which need to be completed to a deadline
	Leadership
	 Discuss the local and national health priorities and how they impact on the delivery of health care relevant to surgery
	 Identify trends, future options and strategy relevant to surgery Compare and banchmark healthcare convises
	 Use a broad range of scientific and policy publications relating to delivering healthcare services
	 Prepare for meetings by reading agendas, understanding minutes, action points and background research on agenda items
	 Work collegiately and collaboratively with a wide range of people outside the immediate clinical setting
	 Evaluate outcomes and re-assess the solutions through research, audit and quality assurance activities
	 Understand the wider impact of implementing change in healthcare provision and the potential for opportunity costs
	Quality and safety improvement
	Adopt strategies to reduce risk
	Contribute to quality improvement processes e.g.
	 Audit of personal and departmental performance
	 Errors / discrepancy meetings Critical incident and near mice reporting
	 Unit morbidity and mortality meetings

	 Local and national databases Maintenance of a personal portfolio of information and evidence Creatively question existing practise in order to improve service and propose solutions
	Management and Health Service Structures
	Manage time and resources effectively
	Utilise and implement protocols and guidelines as necessary
	Participate in managerial meetings
	I ake an active role in promoting the best use of healthcare resources
	Findow new technologies appropriately, including information technology
	 Conduct an assessment of the community needs for specific health
	improvement measures
	Self-awareness and self-management
Behaviour	 To adopt a patient-focused approach to decisions that acknowledges the right, values and strengths of patients and the public To recognise and show respect for diversity and differences in others.
	differences in others
	 To be conscientious, able to manage time and delegate To recognise personal health as an important issue
	Team working
	Encourage an open environment to foster and explore concerns and
	issues about the functioning and safety of team working
	Recognise limits of own professional competence and only practise
	Within these.
	Recognise and respect the skills and expertise of others
	 Recognise the importance of induction for new members of a team
	Recognise the importance of prompt and accurate information sharing
	with other doctors following hospital discharge
	Leadership
	Demonstrate compliance with national guidelines that influence
	healthcare provision
	Articulate strategic ideas and use effective influencing skills
	 Onderstand issues and potential solutions before acting Appreciate the importance of involving the public and communities in
	developing health services
	 Participate in decision making processes beyond the immediate clinical care setting
	Demonstrate commitment to implementing proven improvements in
	clinical practice and services
	Obtain the evidence base before declaring effectiveness of changes
	Quality and safety improvement
	 Participate in safety improvement strategies Develop reflection in order to achieve insight into own professional
	practice
	 Demonstrates personal commitment to improve own performance in the
	light of feedback and assessment
	Respond positively to outcomes of audit and quality improvement

	 Co-operate with changes necessary to improve service quality and safety
	 Management and Health Service Structures Recognise the importance of equitable allocation of healthcare resources and of commissioning
	 Recognise the role of doctors as active participants in healthcare systems
	 Respond appropriately to health service objectives and targets and take part in the development of services
	Recognise the role of patients and carers as active participants in
	 Show willingness to improve managerial skills (e.g. management
	courses) and engage in management of the service
	Self-awareness and self-management
Examples	Obtains feedback as part of an assessment
and	 Participates in peer learning and explores leadership styles and professore
descriptors	Timely completion of written clinical notes
for Early Vears	 Through feedback discusses and reflects on how a personally emotional
Training	situation affected communication with another person
J J	Learns from a session on time management
	Team working
	 Works well within the multidisciplinary team and recognises when
	assistance is required from the relevant team member
	Invites and encourages feedback from patients
	 Demonstrates awareness of own contribution to patient safety within a team and is able to outline the roles of other team members.
	 Keeps records up-to-date and legible and relevant to the safe progress
	of the patient.
	Hands over care in a precise, timely and effective manner
	 Supervises the process of finalising and submitting operating lists to the theatre suite
	Leadership
	Complies with clinical governance requirements of organisation Procents information to clinical and convice managers (e.g. audit)
	 Contributes to discussions relating to relevant issues e.g. workload
	cover arrangements using clear and concise evidence and information
	Quality and safety improvement
	Understands that clinical governance is the over-arching framework that
	unites a range of quality improvement activities
	Participates in local governance processes Maintains personal partfalia
	 Engages in clinical audit
	Questions current systems and processes
	Management and National HealthStructures
	 Participates in audit to improve a clinical service
	Works within corporate governance structures
	Demonstrates ability to manage others by teaching and mentoring

	juniors, medical students and others, delegating work effectively, • Highlights areas of potential waste
Examples and descriptors	 Self awareness and self management Participates in case conferences as part of multidisciplinary and multi agency team Responds to service pressures in a responsible and considered way Liaises with colleagues in the planning and implementation of work rotas
for T&O Specialty Training	 Team working Discusses problems within a team and provides an analysis and plan for change Works well in a variety of different teams Shows the leadership skills necessary to lead the multidisciplinary team Beginning to leads multidisciplinary team meetings Promotes contribution from all team members Fosters an atmosphere of collaboration Ensures that team functioning is maintained at all times. Recognises need for optimal team dynamics Promotes conflict resolution Recognises situations in which others are better equipped to lead or where delegation is appropriate
	 Leadership Shadows Health Service managers Attends multi-agency conference Uses and interprets departments performance data and information to debate services Participates in clinical committee structures within an organisation Quality and safety improvement Able to define key elements of clinical governance Demonstrates personal and service performance Designs audit protocols and completes audit cycle Identifies areas for improvement and initiates improvement projects Supports and participates in the implementation of change Leads in review of patient safety issue Understands change management Management and national health structure Can describe in outline the roles of other healthcare providers Participates fully in clinical coding arrangements and other relevant local activities Discuss the most recent guidance from the relevant health regulatory

	PROFESSIONAL BEHAVIOUR AND LEADERSHIP
Sub-category:	Promoting good health
Objective	 To demonstrate an understanding of the determinants of health and public policy in relation to individual patients To promote supporting people with long term conditions to self-care To develop the ability to work with individuals and communities to reduce levels of ill health and to remove inequalities in healthcare provision To promote self care
Knowledge	 Understand guidance documents relevant to the support of self care Recognises the agencies that can provide care and support out with the hospital Understand the factors which influence the incidence and prevalence of common conditions including psychological, biological, social, cultural and economic factors Understand the screening programmes currently available Understand the possible positive and negative implications of health promotion activities Demonstrate knowledge of the determinants of health worldwide and strategies to influence policy relating to health issues Outline the major causes of global morbidity and mortality and effective, affordable interventions to reduce these
Skills	 Adapts assessment and management accordingly to the patients social circumstances Assesses patient's ability to access various services in the health and social system and offers appropriate assistance Ensures appropriate equipment and devices are discussed and where appropriate puts the patient in touch with the relevant agency Facilitating access to appropriate training and skills to develop the patients' confidence and competence to self care Identifies opportunities to promote change in lifestyle and to prevent ill health Counsels patients appropriately on the benefits and risks of screening and health promotion activities
Behaviour	 Recognises the impact of long term conditions on the patient, family and friends Put patients in touch with the relevant agency from which they can access support or equipment relevant to their care Show willingness to maintain a close working relationship with other members of the multi-disciplinary team, primary and community care Recognise and respect the role of family, friends and carers in the management of the patient with a long term condition Encourage where appropriate screening to facilitate early intervention

Examples and descriptors for Early Years Training	 Understands that "quality of life" is an important goal of care and that this may have different meanings for each patient Promotes patient self care and independence Helps the patient to develop an active understanding of their condition and how they can be involved in self management Discusses with patients those factors which could influence their health
Examples and descriptors for T&O Specialty Training	 Demonstrates awareness of management of long term conditions Develops management plans in partnership with the patient that are pertinent to the patients long term condition Engages with relevant agencies to promote improving patient care Support small groups in a simple health promotion activity Discuss with small groups the factors that have an influence on their health and describe steps they can undertake to address these Provide information to an individual about a screening programme offering specific guidance in relation to their personal health and circumstances concerning the factors that would affect the risks and benefits of screening to them as an individual.

	PROFESSIONAL BEHAVIOUR AND LEADERSHIP
Sub-category:	Probity and Ethics
	To include Acting with integrity Medical Error Medical ethics and confidentiality Medical consent Legal framework for medical practise
Objective	 To uphold personal, professional ethics and values, taking into account the values of the organisation and the culture and beliefs of individuals To communicate openly, honestly and inclusively To act as a positive role model in all aspects of communication To take appropriate action where ethics and values are compromised To recognise and respond the causes of medical error To know, understand and apply appropriately the principles, guidance and laws regarding medical ethics and confidentiality as they apply to surgery To understand the necessity of obtaining valid consent from the patient and how to obtain To recognise, analyse and know how to deal with unprofessional behaviours in clinical practice, taking into account local and national regulations

	Understand ethical obligations to patients and colleagues
	To appreciate an obligation to be aware of personal good health
Knowledge	 Understand local complaints procedure Recognise factors likely to lead to complaints Understands the differences between system and individual errors Outline the principles of an effective apology Knows and understands the applicable professional, legal and ethical codes Understands of the principles of medical ethics Understands the principles of confidentiality Understands the legal framework for patient consent in relation to medical practise Recognises the factors influencing ethical decision making including religion, personal and moral beliefs, cultural practices Understands the legal framework and guidelines for taking and using informed consent for invasive procedures including issues of patient incapacity
Skills	 To recognise, analyse and know how to deal with unprofessional behaviours in clinical practice taking into account local and national regulations To create open and nondiscriminatory professional working relationships with colleagues awareness of the need to prevent bullying and harassment Contribute to processes whereby complaints are reviewed and learned from Explains comprehensibly to the patient the events leading up to a medical error or serious untoward incident, and sources of support for patients and their relatives Deliver an appropriate apology and explanation relating to error Use and share information with the highest regard for confidentiality both within the team and in relation to patients Counsel patients, family, carers and advocates tactfully and effectively when making decisions about resuscitation status, and withholding or withdrawing treatment Present all information to patients (and carers) in a format they understand, checking understanding and allowing time for reflection on the decision to give consent Provide a balanced view of all care options Applies the relevant legislation that relates to the health care system in order to guide one's clinical practice Ability to prepare appropriate medical legal statements Be prepared to present such material in a legal setting
Behaviour	 To demonstrate acceptance of professional regulation To promote professional attitudes and values To demonstrate probity and the willingness to be truthful and to admit errors Adopt behaviour likely to prevent causes for complaints Deals appropriately with concerned or dissatisfied patients or relatives Recognise the impact of complaints and medical error on staff and

	 patients Contribute to a fair and transparent culture around complaints and errors Recognise the rights of patients to make a complaint Identify sources of help and support for patients and yourself when a complaint is made about yourself or a colleague Show willingness to seek advice of peers and professional regulators in the event of ethical dilemmas over disclosure and confidentiality Share patient information as appropriate, and taking into account the wishes of the patient Show willingness to seek the opinion of others when making decisions about resuscitation status, and withholding or withdrawing treatment Seeks and uses consent from patients for procedures that they are competent to perform while Respecting the patient's autonomy Respecting the scope of authority given by the patient Not withholding relevant information Seeks a second opinion, senior opinion, and legal advice in difficult situations of consent or capacity Show willingness to seek advice from the employer and appropriate legal bodies on medico-legal matters
Examples and descriptors for Early Years Training and T&O Specialty Training	 Reports and rectifies an error if it occurs Participates in significant event audits Participates in ethics discussions and forums Apologises to patient for any failure as soon as an error is recognised Understands and describes the local complaints procedure Recognises need for honesty in management of complaints Learns from errors Respect patients' confidentiality and their autonomy Consult appropriately, including the patient, before sharing patient information Participate in decisions about resuscitation status, withholding or withdrawing treatment Obtains consent for interventions that he/she is competent to undertake Knows the limits of their own professional capabilities

Logbook

All trainees must maintain a logbook of all surgical procedures. This is a requirement for assessment for entry to the examination. When recording logbook information, it is essential that when a trainee is the primary surgeon that the level of supervision is accurately recorded. In the more junior years of trauma and orthopaedic training there should be an expectation that the majority of surgical experience will be supervised by the consultant trainer scrubbed in theatre. As the trainee becomes more experienced, the level of supervision can and should diminish. A senior trainee presenting for the examination should be deemed competent to undertake a range of operations unsupervised.

The logbook forms one part of the evidence to support progression in training. Simple numbers of operations alone are not sufficient to demonstrate competency.